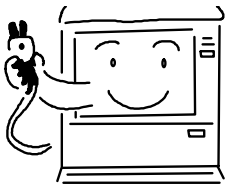
HITACHI

PROJECTION COLOR TV

53SBX10B

OPERATING GUIDE

IMPORTANT SAFEGUARDS **2-3**



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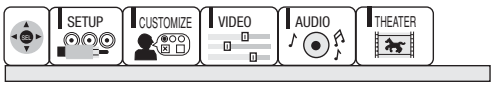

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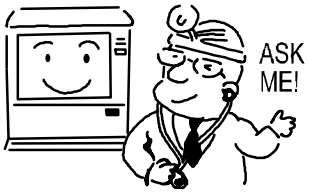


USEFUL INFORMATION INDEX **55-59**

As an ENERGY STAR¤ Partner, Hitachi, Ltd. has determined that this product meets the ENERGY STAR¤ guidelines for energy efficiency.

IMPORTANT SAFETY INSTRUCTIONS

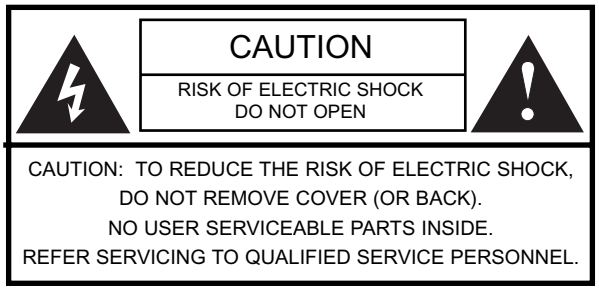
SAFETY POINTS YOU SHOULD KNOW ABOUT YOUR HITACHI TELEVISION

Our reputation has been built on the quality, performance, and ease of service of HITACHI televisions.

Safety is also foremost in our minds in the design of these units. To help you operate these products properly, this section illustrates safety tips which will be of benefit to you. Please read it carefully and apply the knowledge you obtain from it to the proper operation of your HITACHI television.

Please fill out your warranty card and mail it to HITACHI. This will enable HITACHI to notify you promptly in the improbable event that a safety problem should be discovered in your product model.

Follow all warnings and instructions marked on this color television.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated dangerous voltage within the product s enclosure that may be of a sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle, is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING:
TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS TELEVISION TO RAIN OR MOISTURE.

NOTE:
- ¥There are no user serviceable parts inside the color television.
- ¥Model and serial numbers are indicated on back side of the television.
- ¥This television is not intended for use in a computer room.

CAUTION: Adjust only those controls that are covered in the instructions, as improper changes or modifications not expressly approved by HITACHI could void the user s authority to operate the television.

MODIFICATIONS: The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Hitachi America, Ltd. Home Electronics Division may void the user s authority to operate the equipment.

POWER SOURCE

THIS TELEVISION IS DESIGNED TO OPERATE ON 120 VOLTS 60Hz, AC CURRENT. INSERT THE POWER CORD INTO A 120 VOLT 60Hz OUTLET.

TO PREVENT ELECTRIC SHOCK, DO NOT USE THE COLOR TELEVISION S (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE, OR OTHER OUTLET UNLESS THE BLADES AND GROUND TERMINAL CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

NEVER CONNECT THE COLOR TELEVISION TO 50HZ, DIRECT CURRENT, OR ANYTHING OTHER THAN THE SPECIFIED VOLTAGE.

NOTE: This television receiver will display television closed captioning, (CC or), in accordance with paragraph 15.119 of the FCC rules.

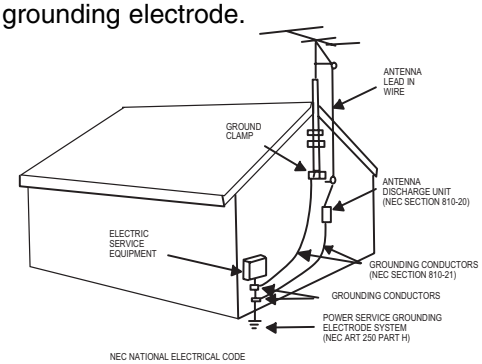
CAUTION: Never remove the back cover of the television as this can expose you to very high voltages and other hazards. If the television does not operate properly, unplug the television and call your authorized dealer or service center.

IMPORTANT SAFETY INSTRUCTIONS

Read before operating equipment

Follow all warnings and instructions marked on this television.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use the attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. Televisions are designed to comply with the recommended safety standards for tilt and stability. Do not apply excessive pulling force to the front, or top, of the cabinet which could cause the product to overturn resulting in product damage and/or personal injury.
16. Follow instructions for wall, shelf or ceiling mounting as recommended by the manufacturer.
17. An outdoor antenna should not be located in the vicinity of overhead power lines or other electrical circuits.
18. If an outside antenna is connected to the receiver be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. Section 810 of the National Electric Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding for the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding connectors, location of antenna-discharge unit, connection to grounding electrodes and requirements for the grounding electrode.


ANTENNA LEAD IN WIRE
GROUND CLAMP
ANTENNA DISCHARGE UNIT (NEC SECTION 810-20)
ELECTRIC SERVICE EQUIPMENT
GROUNDING CONDUCTORS (NEC SECTION 810-21)
GROUNDING CONDUCTORS
POWER SERVICE GROUNDING ELECTRODE SYSTEM (NEC ART 250 PART H)
NEC NATIONAL ELECTRICAL CODE

Note to the CATV system installer: This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Do not place any objects on the top of the television which may fall or cause a child to climb to retrieve the objects.

Disposal of this product may require specific instructions pertaining to your resident state. For disposal or recycling information, please contact your local authorities or the Electronic Industries Alliance: www.eiae.org.

PREVENTION OF PATTERN BURN

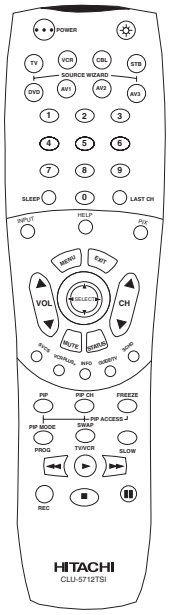
Continuous on-screen displays such as video games, stock market quotations, computer generated graphics, and other fixed (non-moving) patterns can cause permanent damage to television receivers. Such PATTERN BURNS constitute misuse and are **NOT COVERED** by your HITACHI Factory Warranty. When using the Picture-in-Picture function, the sub-picture should not be left permanently in one corner of the screen or a PATTERN BURN may develop over a long period of time.

PUBLIC VIEWING OF COPYRIGHTED MATERIAL

Public viewing of programs broadcast by TV stations and cable companies, as well as programs from other sources, may require prior authorization from the broadcaster or owner of the video program material.

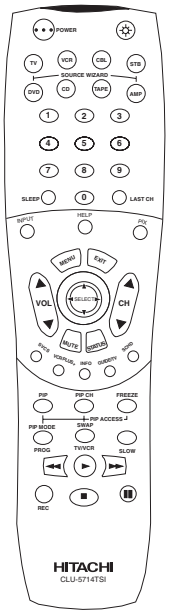
ACCESSORIES

Check to make sure you have the following accessories before disposing of the packing material.



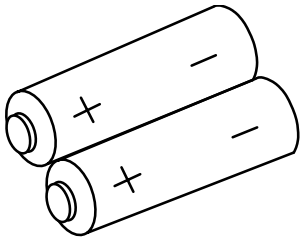
CLU-5712TSI

1.



CLU-5714TSI

1.



2.

1. Remote Control Unit CLU-5712TSI (Part No. HL01642), or
   Remote Control Unit CLU-5714TSI (Part No. HL01644).
2. Two AA size, 1.5V batteries (For Remote Control Unit).

REMOTE CONTROL BATTERY INSTALLATION AND REPLACEMENT

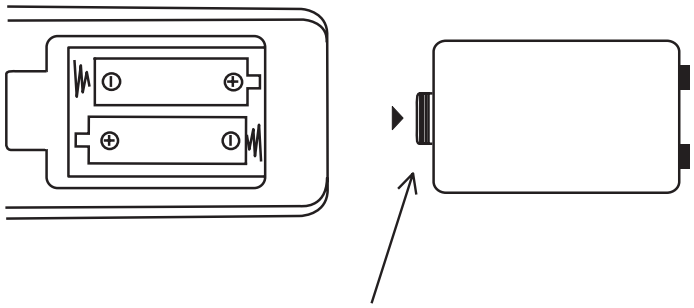
1. Open the battery cover of the remote control by pushing the notched part of the cover with your fingers and pulling the cover off.

2. Insert two new AA size batteries for the remote control. When replacing old batteries, push them towards the springs and lift them out.

3. Match the batteries to the (+) and (-) marks in the battery compartment.

4. Replace the cover.

BOTTOM VIEW



Lift up on tab to remove back cover.

HOW TO SET UP YOUR NEW HITACHI PROJECTION TV

ANTENNA

Unless your TV is connected to a cable TV system or to a centralized antenna system, a good outdoor color TV antenna is recommended for best performance. However, if you are located in an exceptionally good signal area that is free from interference and multiple image ghosts, an indoor antenna may be sufficient.

LOCATION

Select an area where sunlight or bright indoor illumination will not fall directly on the picture screen. Also, be sure that the location selected allows a free flow of air to and from the perforated back cover of the set.
To avoid cabinet warping, cabinet color changes, and increased chance of set failure, do not place the TV where temperatures can become excessively hot, for example, in direct sunlight or near a heating appliance, etc.

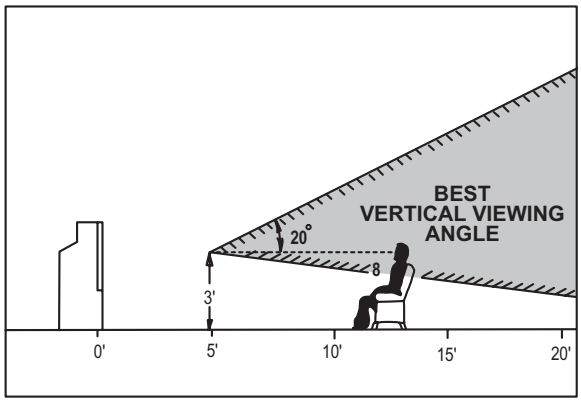
VIEWING

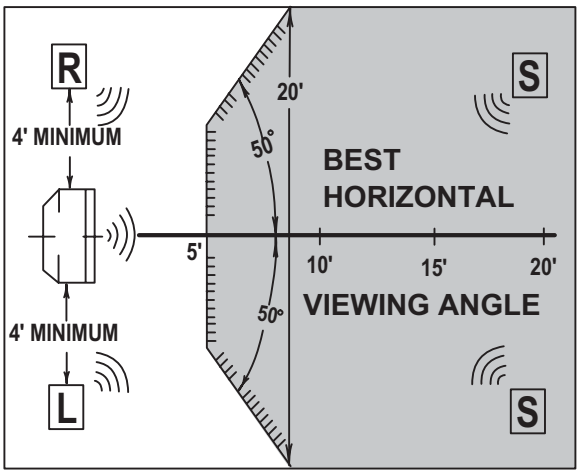
The major benefit of the HITACHI Projection Television is its large viewing screen. To see this large screen at its best, test various locations in the room to find the optimum spot for viewing.

The best picture is seen by sitting directly in front of the TV and about 10 to 18 feet from the screen. Picture brightness decreases as the viewer moves to the left and right of the receiver.

During daylight hours, reflections from outside light may appear on the screen. If so, drapes or screens can be used to reduce the reflection or the TV can be located in a different section of the room.

If the TV s audio output will be connected to a Hi-Fi system s external speakers, the best audio performance will be obtained by placing the speakers equidistant from each side of the receiver cabinet and as close as possible to the height of the picture screen center. For best stereo separation, place the external speakers at least four feet from the side of the TV, place the surround speakers to the side or behind the viewing area. Differences in room sizes and acoustical environments will require some experimentation with speaker placement for best performance.

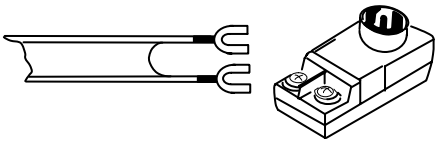




CAUTION: Magnetic fields, such as those of external speakers, may cause the picture to distort if they are placed too close to the television. Move the magnetic field source away from the television until there is no picture distortion.

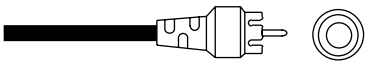
HOOK-UP CABLES AND CONNECTORS

Most video/audio connections between components can be made with shielded video and audio cables that have phono connectors. For best performance, video cables should use 75-Ohm coaxial shielded wire. Cables can be purchased from most stores that sell audio/video products. Below are illustrations and names of common connectors. Before purchasing any cables, be sure of the output and input connector types required by the various components and the length of each cable.



300-Ohm Twin Lead Connector
This outdoor antenna cable must be connected to an antenna adapter (300-Ohm to 75-Ohm).

"F" Type 75-Ohm Coaxial Antenna Connector
For connecting RF signals (antenna or cable TV) to the antenna jack on the television.

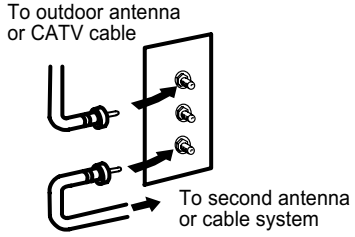


Phono Connector
Used on all standard video and audio cables which connect to inputs and outputs located on the television s rear jack panel and front control panel.

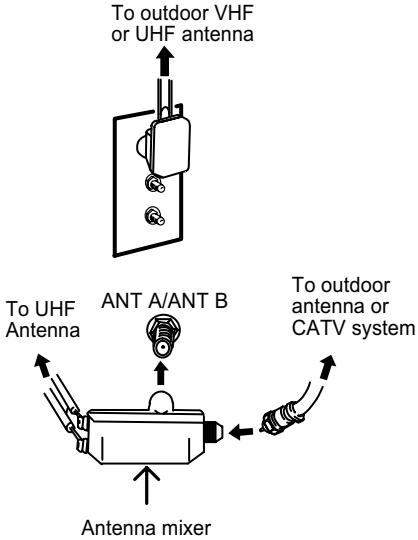
S-VIDEO (Super Video) Connector
This connector is used on camcorders, VCRs, and laserdisc players with an S-VIDEO feature in place of the standard video cable to produce a high quality picture.

ANTENNA CONNECTIONS TO REAR JACK PANEL

VHF (75-Ohm) antenna/CATV (Cable TV)
When using a 75-Ohm coaxial cable system, connect the outdoor antenna or CATV coaxial cable to the ANT A (75-Ohm) terminal. If you have a second antenna or cable TV system, connect the coaxial cable to the ANT B terminal.



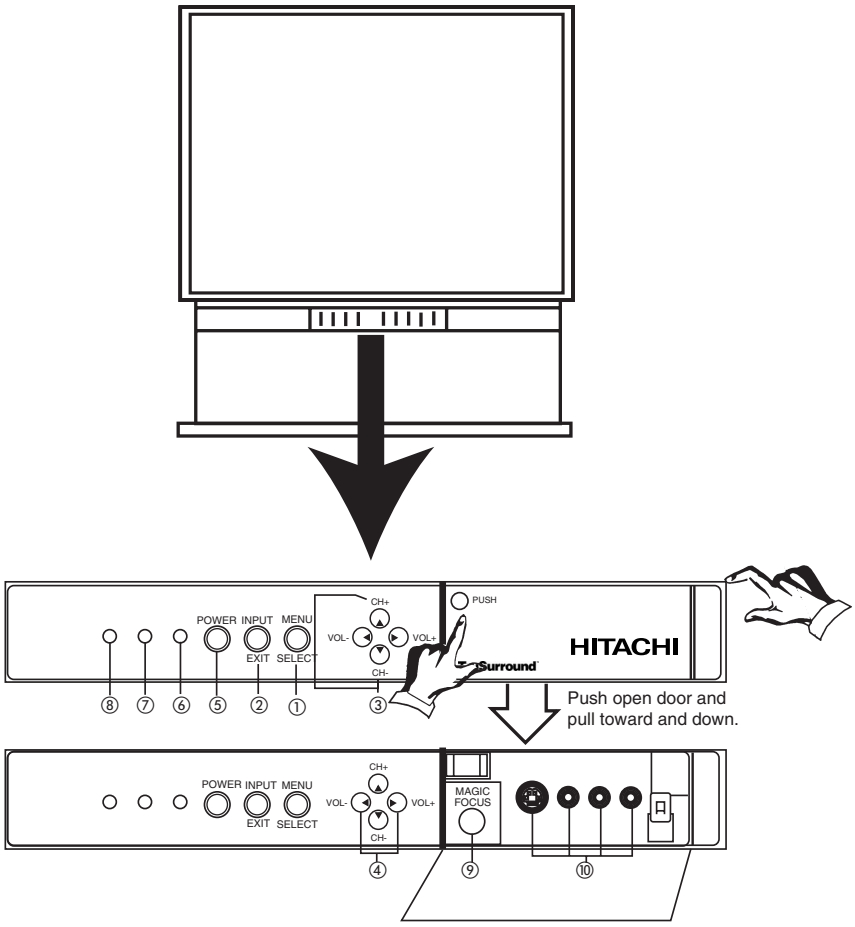
VHF (300-Ohm) antenna/UHF antenna
When using a 300-Ohm twin lead from an outdoor antenna, connect the VHF or UHF antenna leads to screws of the VHF or UHF adapter. Plug the adapter into the antenna terminal on the TV.



When both VHF and UHF antennas are connected
Attach an optional antenna cable mixer to the TV antenna terminal, and connect the cables to the antenna mixer. Consult your dealer or service store for the antenna mixer.

FRONT PANEL CONTROLS

FRONT VIEW



① MENU/SELECT button

This button allows you to enter the MENU, making it possible to set TV features to your preference without using the remote. This button also serves as the SELECT button when in MENU mode.

② INPUT/EXIT button

Press this button to select the current antenna source, VIDEO: 1, 2, 3, 4 or alternate antenna source. Your selection is shown in the top right corner of the screen. This button also serves as the EXIT button when in MENU mode.

③ CHANNEL selector

Press these buttons until the desired channel appears in the top right corner of the TV screen. These buttons also serve as the cursor down (▼) and up (▲) buttons when in MENU mode.

④ VOLUME level

Press these buttons for your desired sound level. The volume level will be displayed on the TV screen. These buttons also serve as the cursor left (◄) and right (►) buttons when in MENU mode.

⑤ POWER button

Press this button to turn the TV on or off.

NOTES: 1. Your HITACHI Projection TV will appear to be turned OFF if there is no video input when VIDEO: 1, 2, 3 or 4 is selected. Check the Power Light to make sure the TV is turned off when not in use.

2. To see an auto-demonstration of the on-screen displays with HELP text displayed, press and hold the POWER button on the TV set for approximately five seconds. Press the POWER button on the TV again to end the auto-demonstration.

⑥ **POWER light**
You will see a red light when the TV is turned on.

⑦ **PERFECT PICTURE sensor**
The Perfect Picture sensor will make automatic picture adjustments depending on the amount of light in the room to give the best picture. (see page 50)

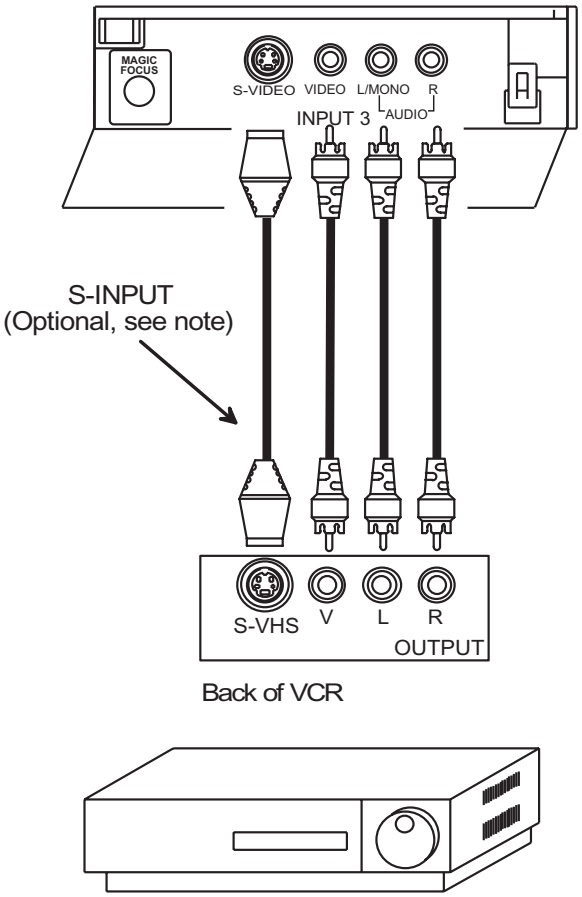
⑧ **REMOTE CONTROL sensor**
Point your remote at this area when selecting channels, adjusting volume, etc.

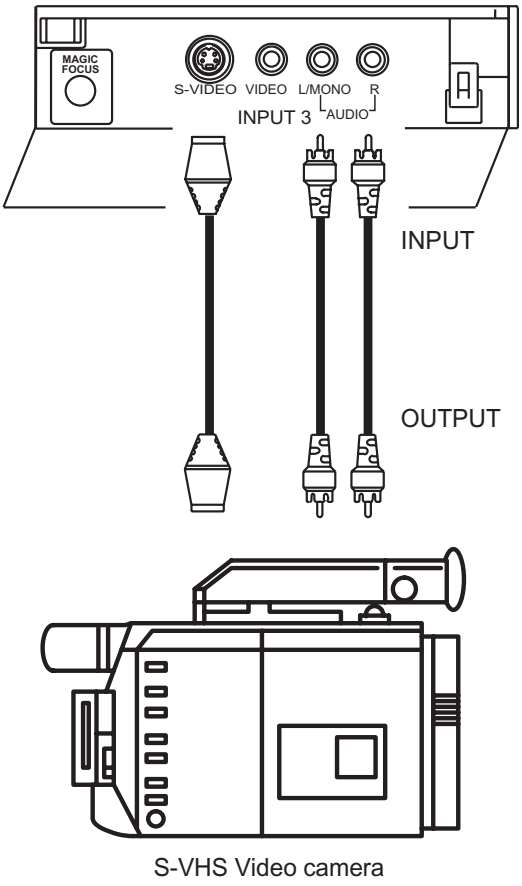
⑨ **MAGIC FOCUS**
Use this button to adjust your picture quality to optimum performance. (see page 40)

⑩ **FRONT INPUT JACKS (for VIDEO: 3)**
Use these audio/video jacks for a quick hook-up from a camcorder or VCR to instantly view your favorite show or new recording. Press the INPUT button until VIDEO: 3 appears in the top right corner of the TV screen. If you have mono sound, insert the audio cable into the left audio jack.

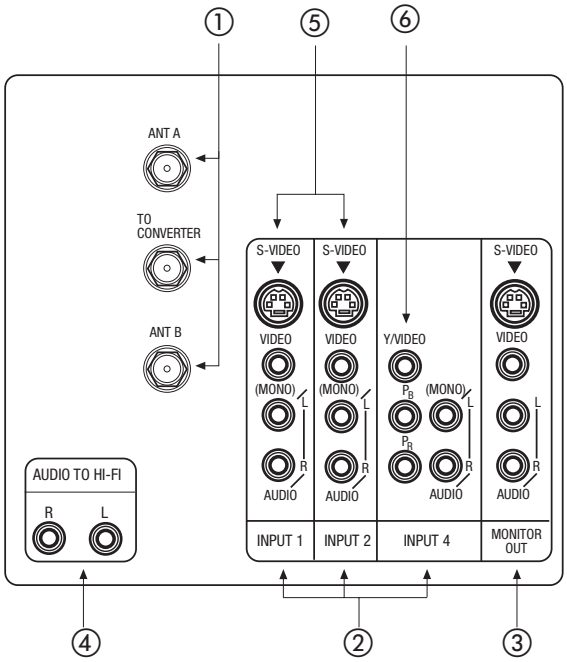
FRONT PANEL JACKS AND CONNECTIONS

The front panel jacks are provided as a convenience to allow you to easily connect a camcorder or VCR as shown in the following examples:





NOTE:
1. Completely insert connection cord plugs when connecting to front panel jacks. If you do not, the played back picture may be abnormal.
2. If you have a S-VHS VCR, use the S-INPUT cable in place of the standard video cable.
3. If you have a mono VCR, insert the audio cable into the left audio jack of your TV.



① **Antenna Input/Output**
The remote control allows you to switch between two separate 75-Ohm RF antenna inputs, ANT A and ANT B. ANT A input can be displayed as a main picture or sub-picture. ANT B can only be displayed as a main picture. (ANT B cannot be displayed as a sub-picture.) The antenna output labeled TO CONVERTER allows the ANT A connection to pass directly to a different source such as a cable box, only when ANT B is displayed as a main picture.

② **Audio/Video Inputs 1, 2 and 4**
The INPUT button will step through each video source and antenna source input each time it is pressed. Use the audio and video inputs to connect external devices, such as VCRs, camcorders, laserdisc players, DVD players etc. (If you have mono sound, insert the audio cable into the left audio jack.)

NOTE: You may use VIDEO or S-VIDEO to connect to INPUT 1 and 2, but only one of these inputs may be used at a time.

③ **MONITOR OUT**
These jacks provide fixed audio and video signals which are used for recording. Use the S-VIDEO Output for high quality video output.

NOTE: S-VIDEO Output may be used for recording, only when the input is of S-VIDEO type.

④ **AUDIO TO HI-FI Output**
These jacks provide variable audio output to a separate stereo amplifier. With this connection, the audio to the stereo can be controlled by the television s main volume.

⑤ **S-VIDEO Inputs 1 and 2**
Inputs 1 and 2 provide S-VIDEO (Super Video) jacks for connecting equipment with S-VIDEO output capability.

REAR PANEL JACKS

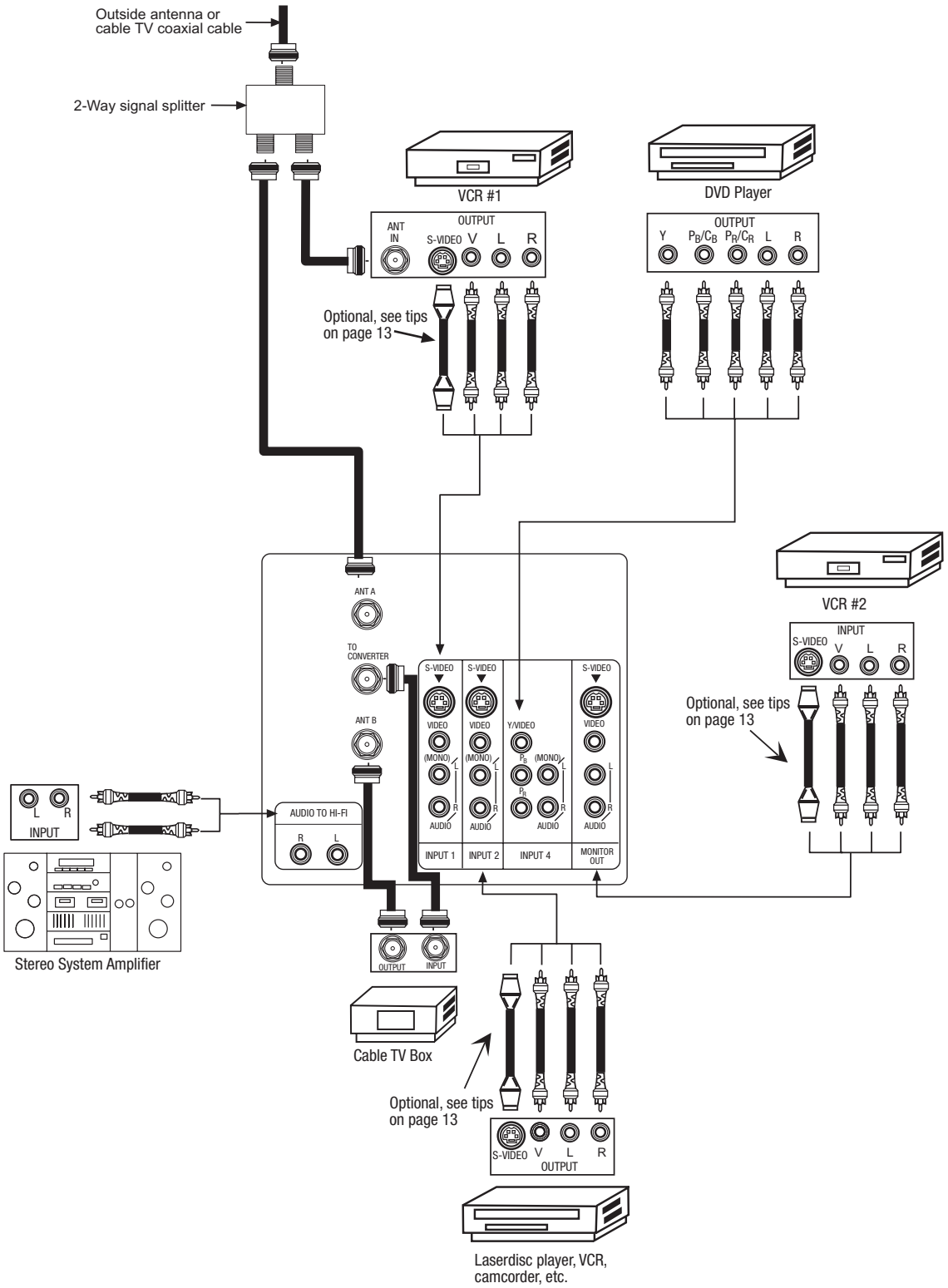
⑥ **Component: Y-P_BP_R Inputs**

Input 4 provides Y-P_BP_R jacks for connecting equipment with this capability, such as a DVD player. You may use standard video signal for INPUT:4.

NOTES:

1. Your component outputs may be labeled Y, B-Y, and R-Y. In this case, connect the components B-Y output to the TV s P_B input and the components R-Y output to the TV s P_R input.
2. Your component outputs may be labeled Y-C_BC_R. In this case, connect the component C_B output to the TV s P_B input and the component C_R output to the TV s P_R input.
3. It may be necessary to adjust TINT to obtain optimum picture quality when using the Y-P_BP_R inputs. (See page 49)
4. To ensure no copyright infringement, the MONITOR OUT output will be abnormal, when using the Y-P_BP_R jacks.
5. When using the Y-P_BP_R input, only 480i signal can be viewed as a sub-picture.
6. Input 4 (Y/VIDEO) can be used for standard video input.
7. Your projection television INPUT:4 can only accept standard video and 480i signals.

TYPICAL FULL-FEATURE SETUP



NOTE:

1. Connect only 1 component to each input jack.
2. Follow connections that pertain to your personal entertainment system.
3. A single VCR can be used for VCR #1 and VCR #2, but note that a VCR cannot record its own video or line output. Refer to your VCR operating guide for more information on line input-output connections.

TIPS ON REAR PANEL CONNECTIONS

TIPS ON REAR PANEL CONNECTIONS

S-VIDEO connections are provided for high performance laserdisc players, VCRs etc. that have this feature. Use these connections in place of the standard video connection if your device has this feature.

If your device has only one audio output (mono sound), connect it to the left audio jack on the television.

Refer to the operating guide of your other electronic equipment for additional information on connecting your hook-up cables.

A single VCR can be used for VCR #1 and VCR #2, but note that a VCR cannot record its own video or line output (INPUT: 1 in the example on page 12). Refer to your VCR operating guide for more information on line input-output connections.

You may use VIDEO or S-VIDEO inputs to connect to Input 1 or Input 2, but only one of these may be used at a time.

Connect only 1 component (VCR, DVD player, camcorder, etc.) to each input jack.

COMPONENT: Y-$P_B P_R$ (INPUT:4) connection is provided for high performance components, such as DVD players. Use this connection in place of the standard video connection if your device has this feature.

Your component outputs may be labeled Y, B-Y, and R-Y. In this case, connect the components B-Y output to the TV s Pb input and the components R-Y output to the TV s P_R input.

Your component outputs may be labeled Y-$C_B C_R$. In this case, connect the components C_B output to the TV s P_B input and the components C_R output to the TV s P_R input.

You may use standard video signal or 480i signal for INPUT:4.

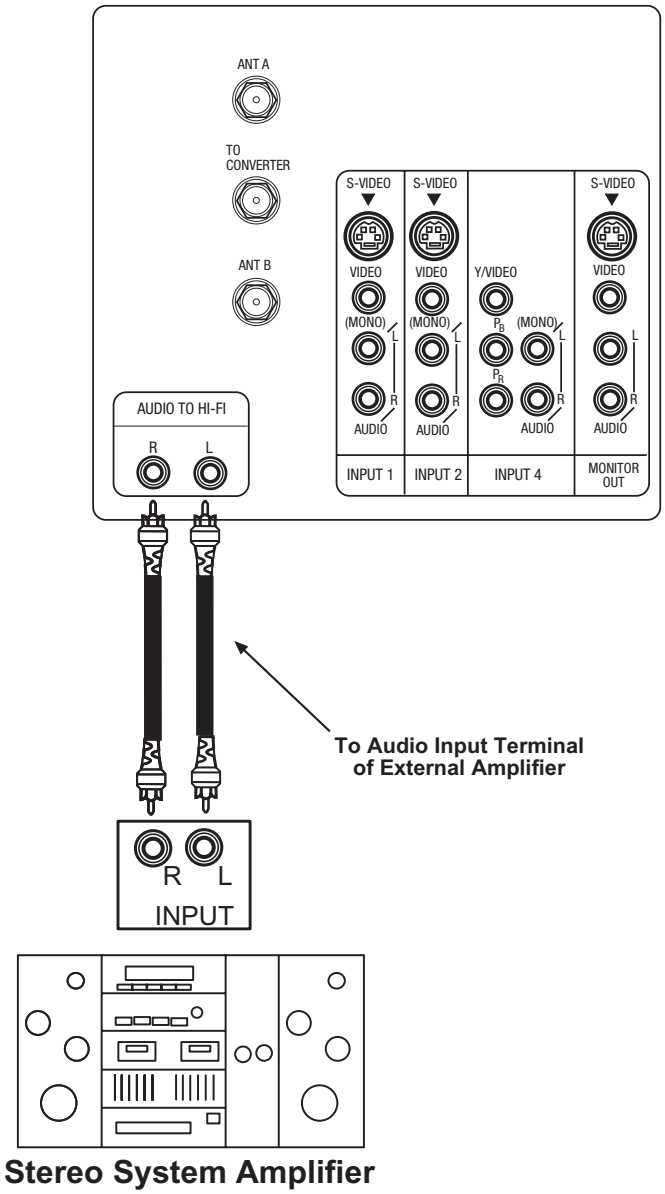
It may be necessary to adjust TINT to obtain optimum picture quality when using the Y-$P_B P_R$ inputs. (See page 49)

To ensure no copyright infringement, the MONITOR OUT output will be abnormal, when using the Y-$P_B P_R$ jacks.

CONNECTING EXTERNAL AUDIO AMPLIFIER

To control the audio level of an external audio amplifier with the remote control, connect the system as shown below.

REAR PANEL OF TELEVISION



Stereo System Amplifier

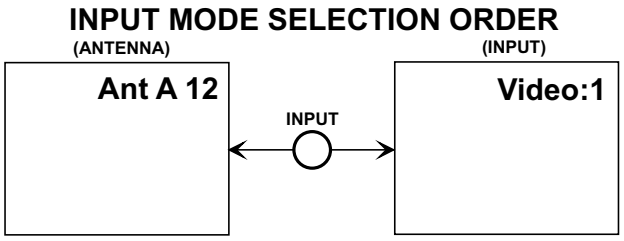
NOTE:	To prevent damage to the speaker and distorted sound, set the volume control of the audio amplifier lower and adjust the sound using the remote control of the TV set.

CONNECTING EXTERNAL VIDEO SOURCES

The exact arrangement you use to connect the VCR, camcorder, laserdisc player or DVD player to your TV set is dependent on the model and features of each component. Check the owner's manual of each component for the location of video and audio inputs and outputs.

The following connection diagrams are offered as suggestions. However, you may need to modify them to accommodate your particular assortment of components and features. For best performance, video and audio cables should be made from coaxial shielded wire.

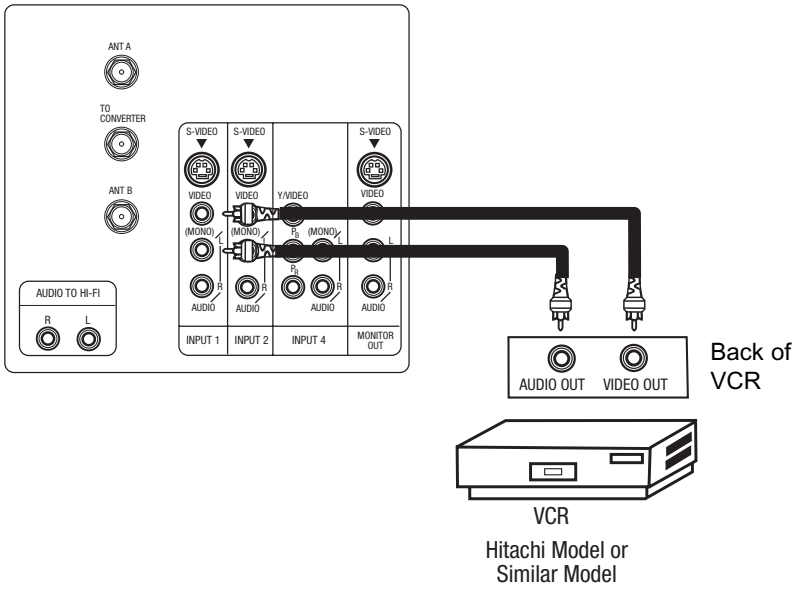
Before Operating External Video Source
The input mode is changed every time the INPUT button is pressed as shown below. Connect an external source to the INPUT terminal, then press the INPUT button as necessary to view the input source. (See page 21)



NOTE: When the TV is set to VIDEO and a video signal is not received from the VIDEO INPUT JACK on the back panel of the TV (i.e., VCR/laserdisc player, etc. is not connected or the video device is OFF), the set will appear to be OFF.

CONNECTING A MONAURAL AUDIO TO INPUT1~INPUT4

1. Connect the cable from the VIDEO OUT of the monoaural source to the INPUT (VIDEO) jack, as shown on the TV set below.
2. Connect the cable from the AUDIO OUT of the monaural source to the INPUT (MONO)/L(AUDIO) jack.
3. Press the INPUT button to view the program from the monaural source. The VIDEO mode disappears automatically after approximately eight seconds.
4. Press the INPUT button to return to the previous channel.



CONNECTING EXTERNAL VIDEO SOURCES

CONNECTING A STEREO SOURCE TO INPUT1~INPUT4

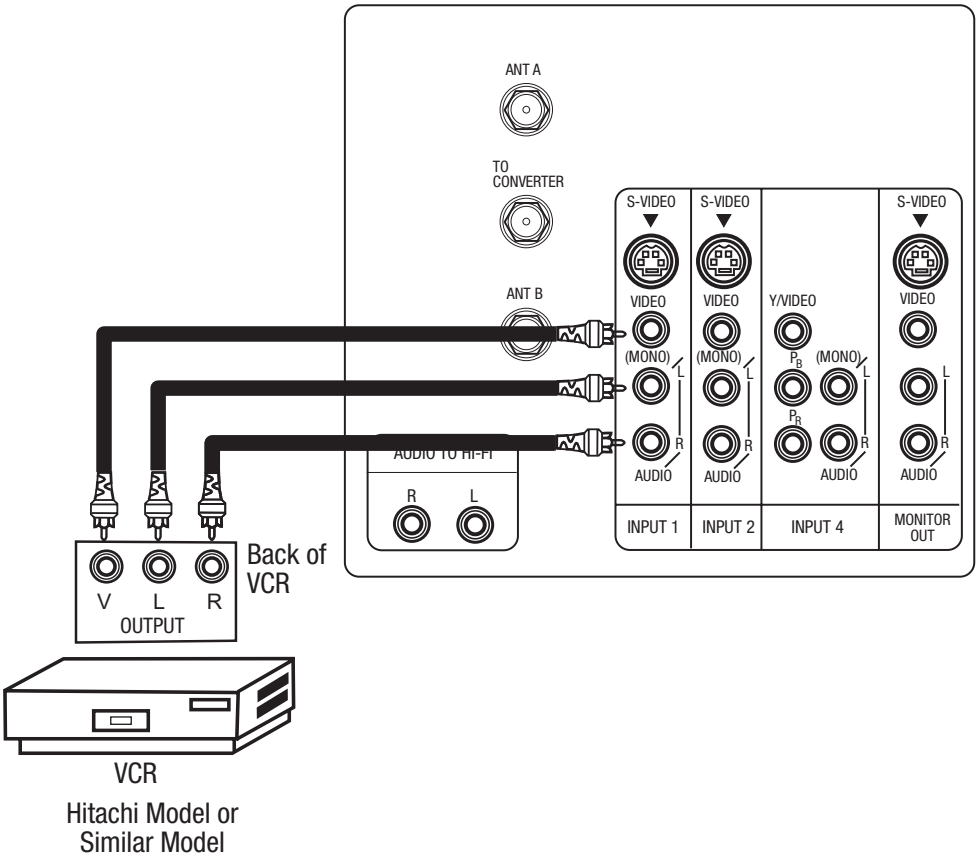
1. Connect the cable from the VIDEO OUT of the VCR or the laserdisc player to the INPUT (VIDEO) jack, as shown on the TV set below.

2. Connect the cable from the AUDIO OUT R of the VCR or the laserdisc player to the INPUT (AUDIO/R) jack.

3. Connect the cable from the AUDIO OUT L of the VCR or the laserdisc player to the INPUT (AUDIO/L) jack.

4. Press the INPUT button to view the program from the VCR or laserdisc player. The VIDEO icon disappears automatically after approximately eight seconds.

5. Press the INPUT button to return to the previous channel.



NOTE: Completely insert the connection cord plugs when connecting to rear panel jacks. The picture and sound that is played back will be abnormal if the connection is loose.

CONNECTING EXTERNAL VIDEO SOURCES

CONNECTING AN S-VIDEO SOURCE TO INPUT 1, 2, AND 3

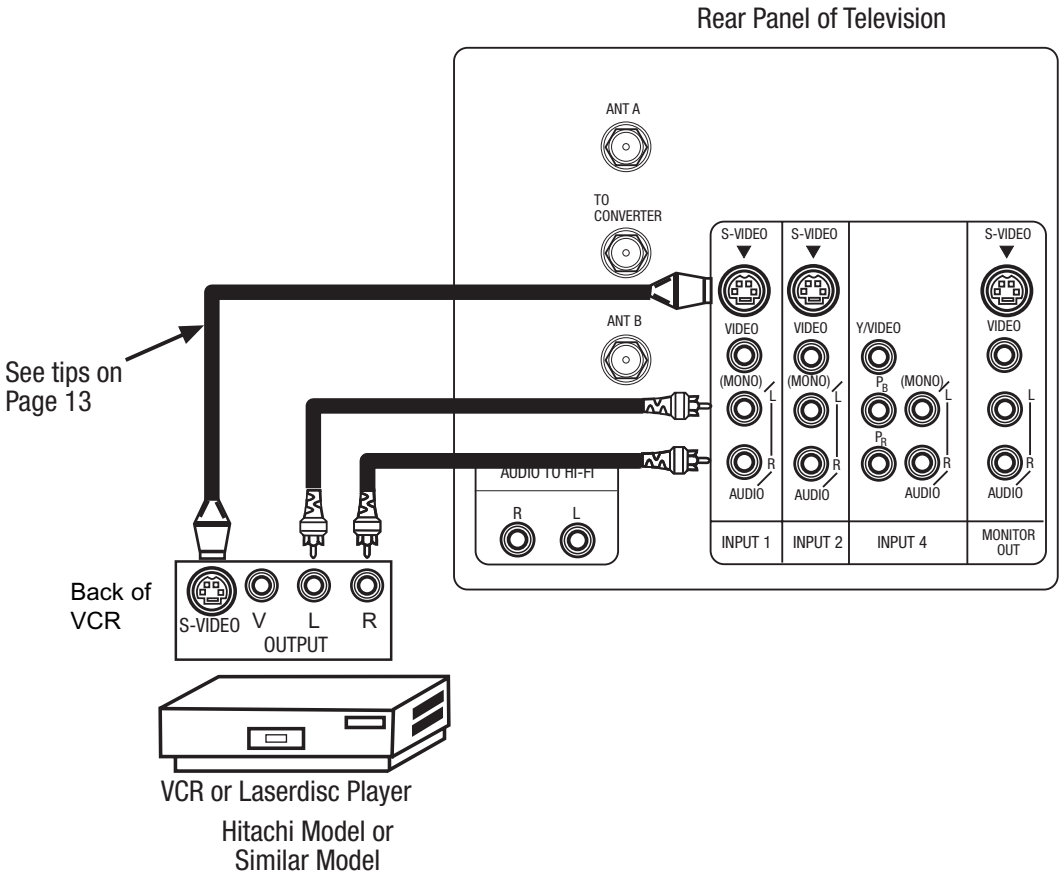
1. Connect the cable from the S-VIDEO OUT of the VCR or the laserdisc player to the INPUT (S-VIDEO) jack, as shown on the TV set below.

2. Connect the cable from the AUDIO OUT R of the VCR or the laserdisc player to the INPUT (AUDIO/R) jack.

3. Connect the cable from the AUDIO OUT L of the VCR or the laserdisc player to the INPUT (AUDIO/L) jack.

4. Press the INPUT button to view the program from the VCR or laserdisc player. The VIDEO icon disappears automatically after approximately eight seconds.

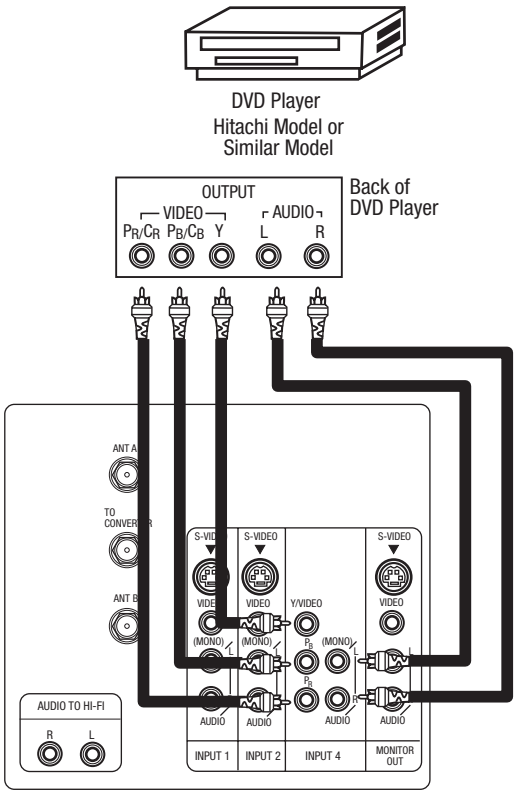
5. Press the INPUT button to return to the previous channel.



NOTE: Completely insert the connection cord plugs when connecting to rear panel jacks. The picture and sound that is played back will be abnormal if the connection is loose.

CONNECTING A COMPONENT SOURCE TO VIDEO 4: Y-P_BP_R.

1. Connect the cable from the Y OUT of the Laserdisc/DVD player to the INPUT (Y) jack, as shown on the TV set below.
2. Connect the cable from the C_B/P_B OUT or B-Y OUT of the Laserdisc/DVD player to the INPUT ($P_{B)}$ jack.
3. Connect the cable from the C_R/P_R OUT or R-Y OUT of the Laserdisc/DVD player to the INPUT (P_R) jack.
4. Connect the cable from the AUDIO OUT R of the Laserdisc/DVD player to the INPUT (AUDIO/R) jack.
5. Connect the cable from the AUDIO OUT L of the Laserdisc/DVD player to the INPUT (AUDIO/L) jack.
6. Press the INPUT button to view the program from the Laserdisc/DVD player. The VIDEO icon disappears automatically after approximately eight seconds.
7. Press the INPUT button to return to the previous channel.



Rear Panel of Television

NOTE:
1. You may use standard video signal or 480i signal for INPUT:4.
2. Completely insert the connection cord plugs when connecting to rear panel jacks. The picture and sound that is played back will be abnormal if the connection is loose.
3. See page 12 for tips on REAR PANEL CONNECTIONS.

THE GENIUS REMOTE CONTROL

In addition to controlling all the functions on your HITACHI Projection TV, the new remote control is designed to operate different types of VCRs, CATV (Cable TV) converters, satellite receivers, DVD players, and other audio/video equipment with one touch. Basic operation keys are grouped together in one area.

To operate your TV, point the remote control at the remote sensor of the TV and press the TV button. The TV button will blink, indicating that the remote will now control your television.

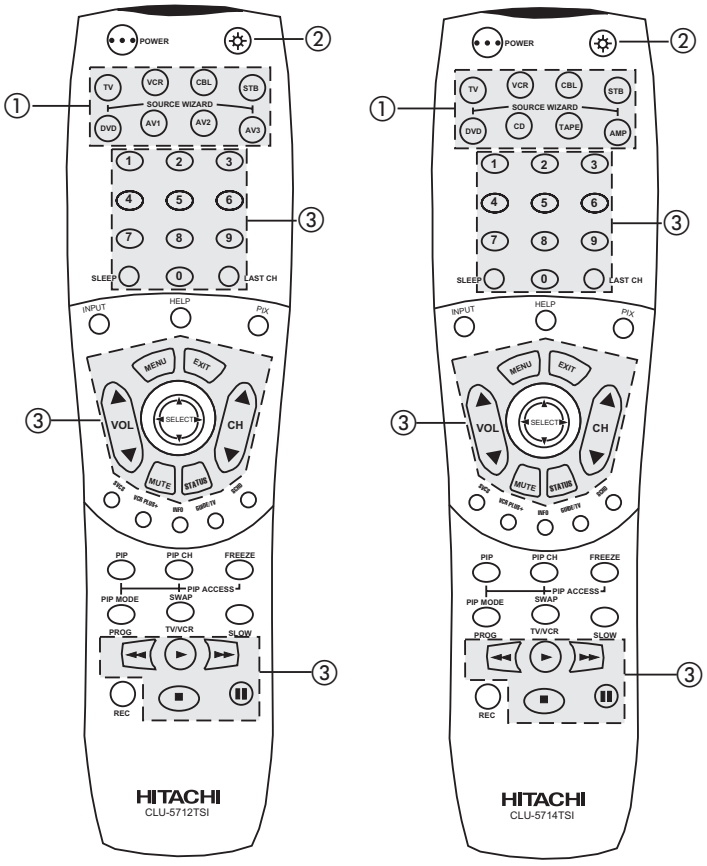
To operate your VCR, point the remote at the remote sensor of the VCR and press the VCR button. The VCR button will blink, indicating that the remote will now control your VCR. (See page 26 for instructions on how to program the remote to control your VCR.)

To operate your cable box, point the remote at the remote sensor of the cable box and press the CABLE (CBL) button. The CBL button will blink, indicating that the remote will now control your cable box. (See page 27 for instructions on how to program the remote to control your cable box.)

To operate your set-top-box, point the remote at the remote sensor of the your set-top-box and press the SET-TOP-BOX (STB) button. The STB button will blink, indicating that the remote will now control your your set-top-box. If you have a satellite receiver, use this button to program your satellite receiver. (See page 28 for instructions on how to program the remote to control your satellite receiver.)

To operate your DVD player, point the remote at the remote sensor of the DVD player and press the DVD button. The DVD button will blink, indicating that the remote will now control your DVD player. (See page 29 for instruction on how to program the remote to control your DVD player.)

To operate additional audio/video equipment, point the remote at the remote sensor of the component you wish to control and press the AV1, AV2 or AV3 button. This button will blink, indicating that the remote will now control the desired component. (See page 30 for instructions on how to program the remote to control additional Audio/Video equipment.)



① These buttons allow the remote to control your TV, VCR, cable box, satellite receiver, DVD player, or other Audio/Video equipment depending on which mode is chosen, as explained above.

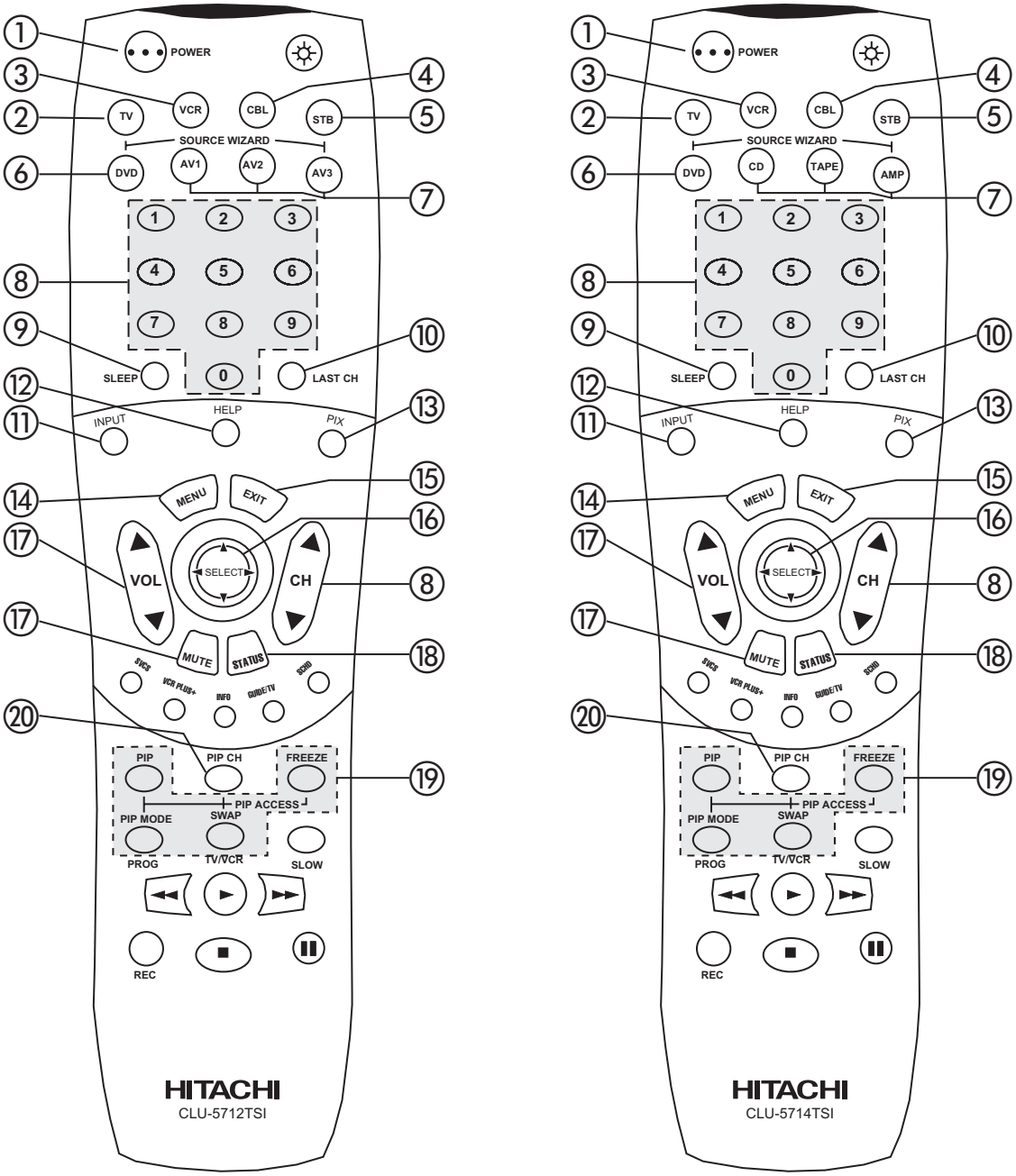
②,③ **LIGHT BUTTON**

When you are in a dark room, press the light button ② on the remote to light up the buttons shown in ③ and the source button will blink. The light will stay on for about 8 seconds if the light button is not pressed again. These buttons will not appear to light if the room is too bright.

NOTE: 1. Your remote control SOURCE WIZARD buttons are either labeled as AV1, AV2 and AV3, or CD, TAPE, and AMP. If your remote control SOURCE WIZARD buttons are labeled as AV1, AV2, and AV3, please program your Audio/Video components as follow for best performance. Use AV1 to program your CD brand. Use AV2 to program your TAPE brand, and use AV3 to program your AMPLIFIER/RECEIVER brand.

AV1-Use for CD brand
AV2-Use for TAPE brand
AV3-Use for AMPLIFIER/RECEIVER brand.

HOW TO USE THE GENIUS REMOTE TO CONTROL YOUR TV



① **POWER button**
Press this button to turn the TV set on or off when the remote is in TV mode.

② **TV button**
When the TV button is pressed, it will blink, to indicate the remote is in TV mode.

③ **VCR button**
When the VCR button is pressed, it will blink to indicate the remote is in VCR mode. (see page 26)

④ **CABLE (CBL)**
When the CABLE button is pressed, it will blink to indicate the remote is in CABLE mode. (see page 27)

⑤ **SET-TOP-BOX (STB)**
When the STB button is pressed, it will blink to indicate the remote is in STB mode. (see page 28)
If you have a Satellite receiver, use this button to program your Satellite receiver. (see page 28)

⑥ **DVD button**
When the DVD button is pressed, it will blink to indicate the remote is in DVD mode. (see page 29)

HOW TO USE THE GENIUS REMOTE TO CONTROL YOUR TV

⑦ **AV1, AV2, AV3, or CD, TAPE, AMP buttons**
When pressed, each of these buttons will blink to indicate the remote is in Audio/Video mode. (see page 30)

NOTE: Your remote control SOURCE WIZARD buttons are either labeled as AV1, AV2 and AV3, or CD, TAPE, and AMP. If your remote control SOURCE WIZARD buttons are labeled as AV1, AV2, and AV3, please program your Audio/Video components as follow for best performance. Use AV1 to program your CD brand. Use AV2 to program your TAPE brand, and use AV3 to program your AMPLIFIER/RECEIVER brand.

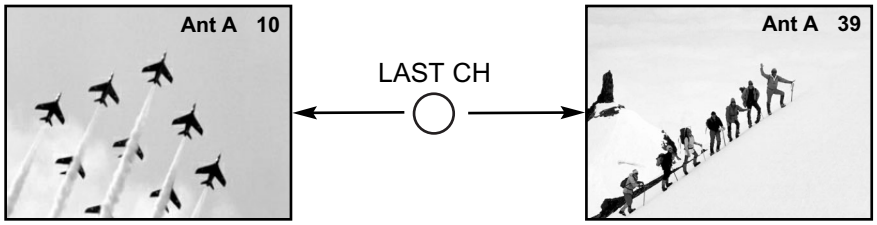
AV1-Use for CD brand
AV2-Use for TAPE brand
AV3-Use for AMPLIFIER/RECEIVER brand.

⑧ **CHANNEL selector buttons**
CHANNEL selector buttons are used to set FAMILY FAVORITES, CHANNEL MEMORY, etc.
Enter one, two, or three numbers to select channels. Enter 0 first for channels 1 to 9, or simply press the single digit channel you wish to tune then wait a few seconds for the TV to tune. For channels 100 and above, press the 1 button, wait until two dashes appear next to the channel display on your TV, then enter the remaining two numbers using the number buttons.
Channel selection may also be performed by pressing CH up (▲) or down (▼).

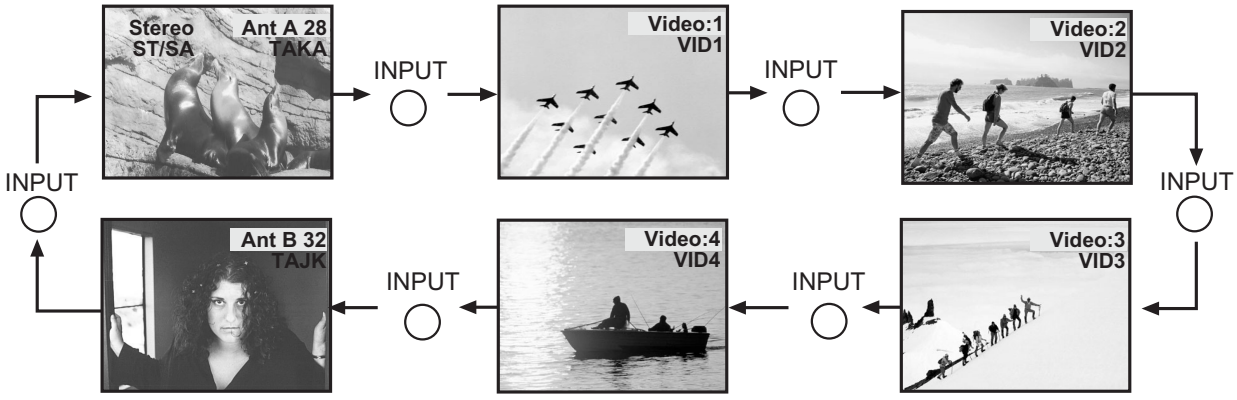
NOTE: The TV may not receive some channels if you are not in the correct SIGNAL SOURCE mode. (see page 35)

⑨ **SLEEP button**
Press this button to display the sleep timer in the lower left corner of the screen. Every subsequent press of this button will add 15 minutes to this timer, up to a maximum of three hours. Once set, use STATUS when you want to view time remaining. If the SLEEP button is pressed while the timer is set, it will reset to the original condition.

⑩ **LAST CHANNEL (LAST CH) button**
Use this button to select between the last two channels viewed. (Good for watching two sporting events, etc.)



⑪ **INPUT button**
Press this button to select from the four input sources and the two antenna sources.



⑫ **HELP button**
Press this button when a menu is displayed to view HELP text, which gives a description of the displayed menu. The HELP text will be displayed every time a MENU is displayed, until this button is pressed again.

⑬ **PIX button**
Press this button repeatedly to direct access THEATER MODE between Sport, News, Movie, and Music.

⑭ **MENU button**
The MENU button will start the On-Screen Display.

⑮ **EXIT button**
When in MENU mode, this button will exit all On-Screen Displays.

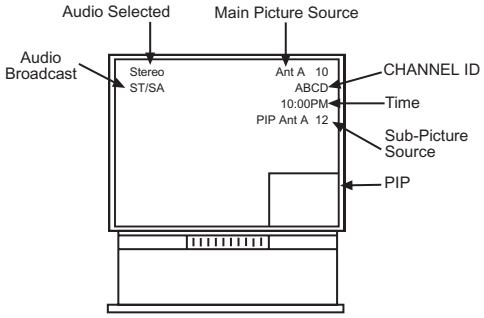
⑯ **THUMB STICK/SELECT button**
All the On-Screen Display features can be set or adjusted by using the THUMB STICK.
The THUMB STICK will highlight functions or adjust and set different features. Press the THUMB STICK toward desired direction and press down to SELECT.

⑰ **VOLUME, MUTE button**
Press the VOLUME up (▲) or down (▼) button until you obtain the desired sound level.

To reduce the sound to one half of normal volume (SOFT MUTE) to answer the telephone, etc., press the MUTE button. Press the MUTE button again to turn the sound off completely (MUTE). To restore the sound, press the MUTE button one more time, or press the VOLUME Up (▲) button.

Closed Captioning will display when MUTE/SOFT MUTE is on and Closed Caption is set to AUTO (See page 48).

⑱ **STATUS button**
Press this button when no menu is displayed when you want to check the channel being received, the picture source, if the channel has stereo (ST) or second audio program (SAP), the time, CHANNEL ID, and if the SLEEP timer is set.



When an S-VIDEO Input is connected to VIDEO: 1.

When a COMPONENT VIDEO: Y PbPr Input is connected to VIDEO: 4.

⑲ **PICTURE-IN-PICTURE buttons**
See separate section on pages 23 and 24 for a description.

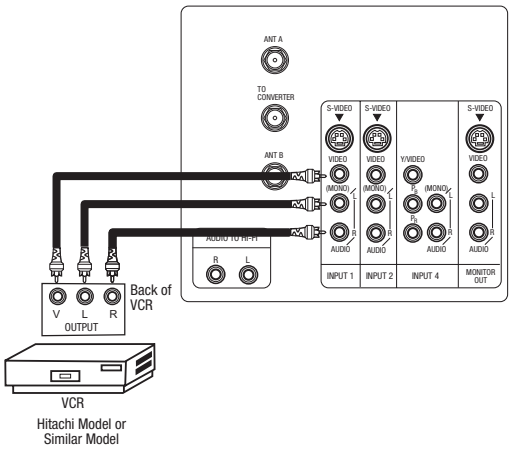
⑳ **PIP CH button**
Use the PIP CH button to select between main picture and sub-picture tuning. The channel which is highlighted indicates what channel is being controlled.

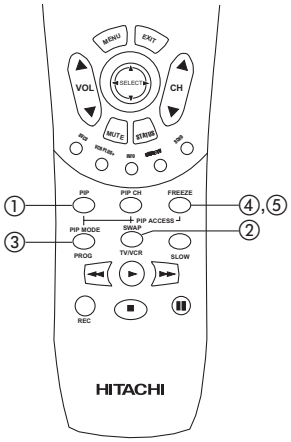
PICTURE-IN-PICTURE (PIP)

Your HITACHI Projection TV incorporates Dual Tuner technology designed for improved viewing enjoyment. This Dual Tuner feature allows you to view antenna inputs on both the main picture and sub-picture simultaneously, with separate tuning control for each. The Dual Tuner can operate with only one input (ANT A only) or two inputs (ANT A and ANT B).

ANT A input can be viewed as both the main picture and the sub-picture simultaneously. ANT B can only be viewed as a main picture. To select between main picture and PIP sub-picture tuning, press the PIP CH button on the remote. The highlighted channel display will move with every press of the PIP CH button. When the top channel display is highlighted, channel tuning is for the main picture. When the lower channel display is highlighted, channel tuning is for the PIP sub-picture. This method of picture tuning is the same for one antenna input (ANT A only) and two antenna inputs (ANT A and ANT B).

The Picture-in-Picture feature is convenient when you want to watch more than one program at the same time. You can watch a TV program while viewing other programs from the ANT A source or any of the video inputs.





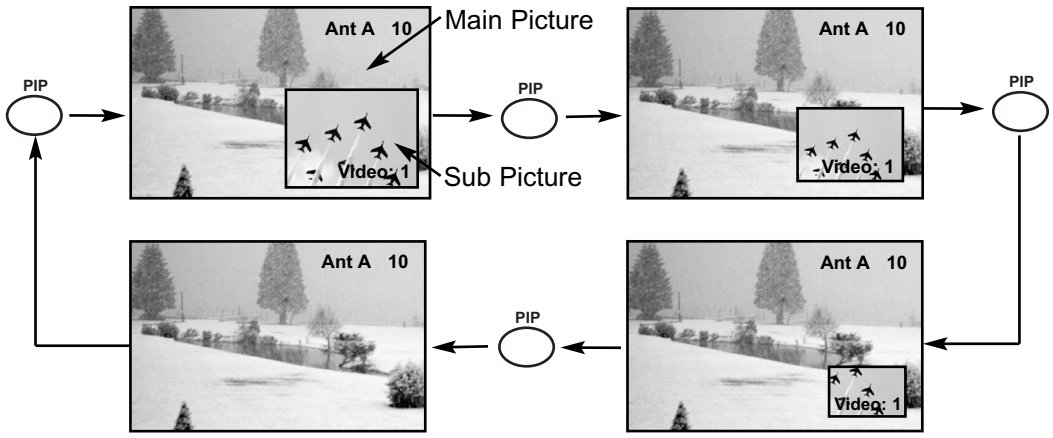
Use above connection to view VCR program as a sub-picture while viewing another program as main picture (ANT A, ANT B, V:2 V:3 or V:4 input). You may also view the VCR program as a main picture while viewing another program as a sub-picture (ANT A, V:2, V:3 or V:4 input).

① PIP button

Press the PIP button and a sub-picture will appear in one of the two different modes (SINGLE or SURF), depending on the last selection of the PIP mode. To change the PIP mode, use the PIP MODE button to cycle through the two different modes.

SINGLE MODE PIP

Press the PIP button and a sub-picture appears in one corner of the screen. Press the PIP button again to change the sub-picture size. Press the PIP button a fourth time to remove the sub-picture from the screen. Use the PIP CH button to select between main and sub-picture tuning control (indicated by highlighted channel display.) Press the INPUT button when sub-picture channel tuning is being controlled, to change between VIDEO: 1, VIDEO: 2, VIDEO: 3, VIDEO:4 and ANT A antenna source. (ANT B source cannot be viewed as a sub-picture.)



NOTES:
1. When using Y-P_BP_R input, only 480i signal can be viewed as a sub-picture
2. When ANT B is selected as the main channel, the SWAP feature is disabled.
3. Only sound from the main picture can be heard.

PICTURE-IN-PICTURE CONT.

SURF MODE PIP

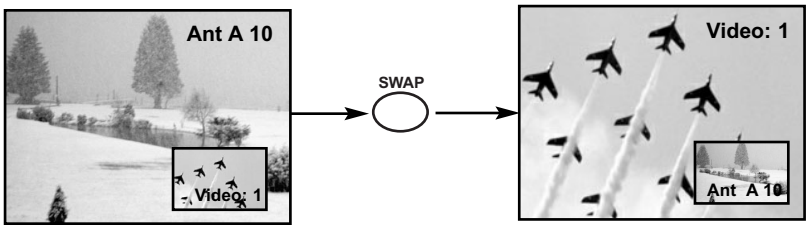
This feature will automatically scan all active channel numbers (those set in memory) and display them as PIP sub-pictures, along the right edge of the screen. Press the PIP button a second time to remove the sub-pictures from the screen.

NOTES:
1. If no buttons are pressed when in SURF mode, auto-scanning will continuously scan channels in memory. (see pages 36 and 37)
2. If a channel is tuned during this SURF scanning, sub-pictures will be removed from the screen.
3. SURF MODE PIP is allowed only when ANT A is selected as the main channel.
4. If PARENTAL CONTROL MOVIE/TV RATINGS setting is ON, PIP SURF mode will be deactivated.
5. Closed Caption will not appear when PIP SURF mode is on.

② **SWAP button**

If you wish to switch what is being shown on the main picture to the sub-picture, press the SWAP button.

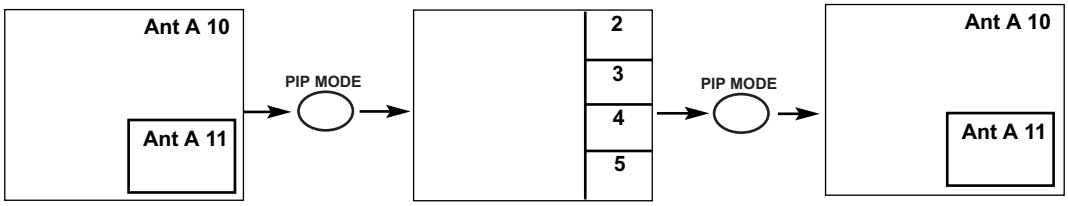
SINGLE



NOTES:
1. The SWAP button will only operate when SINGLE PIP mode is chosen.
2. The SWAP function will not operate if ANT B input is set as the main channel (ANT B input cannot be displayed as a sub-picture.)

③ **PIP MODE button**

To change between the two different PIP modes (SINGLE or SURF) press the PIP MODE button when PIP is ON. Each press of this button will change PIP to a different mode. Pressing this button two times will cycle through both PIP modes.



NOTES: SURF mode PIP is only allowed when ANT A is the main picture.

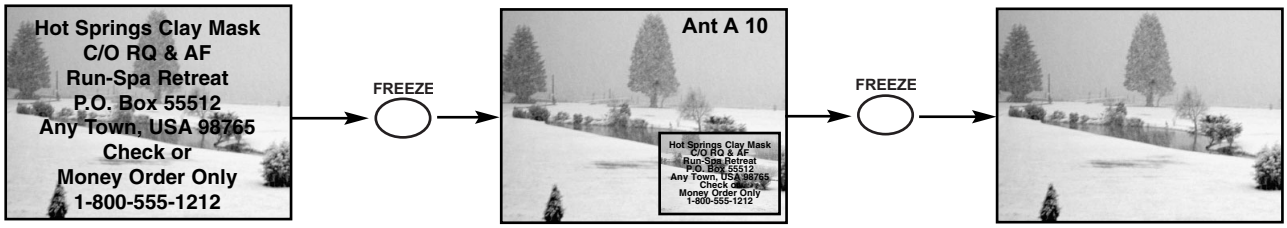
PICTURE-IN-PICTURE (PIP)

④ **FREEZE button (With PIP ON)**
If you wish to freeze the sub-picture, press the FREEZE button. This is convenient when trying to write down the address for a mail order company, recording statistics for a sporting event, etc. To return the picture to motion, press the FREEZE button again.

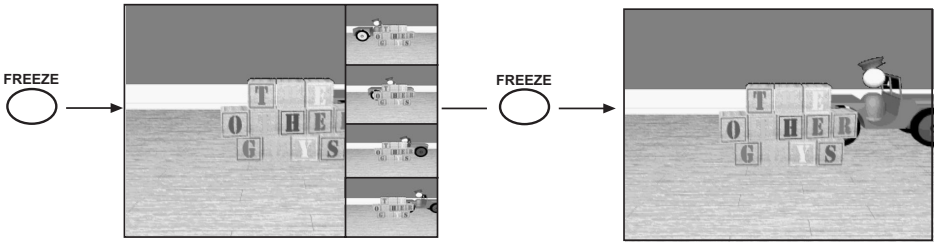
NOTE: The FREEZE function will only operate when SINGLE PIP mode is chosen.

⑤ **FREEZE button (With PIP OFF)**
Press the FREEZE button to freeze the picture, depending on the mode selected (SINGLE or STROBE).
To change FREEZE modes, use the PIP MODE button to cycle through the two different modes.

SINGLE FREEZE
Press the FREEZE button to freeze one frame of the picture you are currently viewing. Press this button again or PIP to return to normal viewing.



STROBE FREEZE
Press the FREEZE button to freeze four frames of the picture you are currently viewing. Press this button again or PIP to return to normal viewing. This feature is useful for viewing a moving picture that has many details, for example, a close play in a sporting event or a golf swing.



CAUTION: A pattern burn may develop if the sub-picture is left in the same corner permanently. If the PIP feature is used frequently, occasionally MOVE the sub-picture using the THUMB STICK ◄, ►, ▲, or ▼.

NOTES: Each freeze frame is delayed about 0.1 (1/10) second.

USING THE REMOTE TO CONTROL VCR FUNCTIONS

Operating the precoded function for your VCR.

This remote is designed to operate different types of VCRs. You must first program the remote to match the remote system of your VCR. (refer to page 31 for pre-codes)

1. Turn ON your VCR.
2. Aim the remote control at the front of your VCR.
3. Press and release the VCR button to switch to VCR pre-coded mode.
4. Hold down the VCR button on the remote and enter the two digit preset code that matches your VCR, as shown on page 31. The indicator light will flash 3 times if the code was accepted.
5. Aim the remote at the VCR and press the POWER button. The remote will turn off your VCR when the correct two digit preset code is entered. When this occurs, the remote control is programmed for your VCR. If the VCR does not turn off, try a different two digit preset code.
6. The remote will now control your VCR.

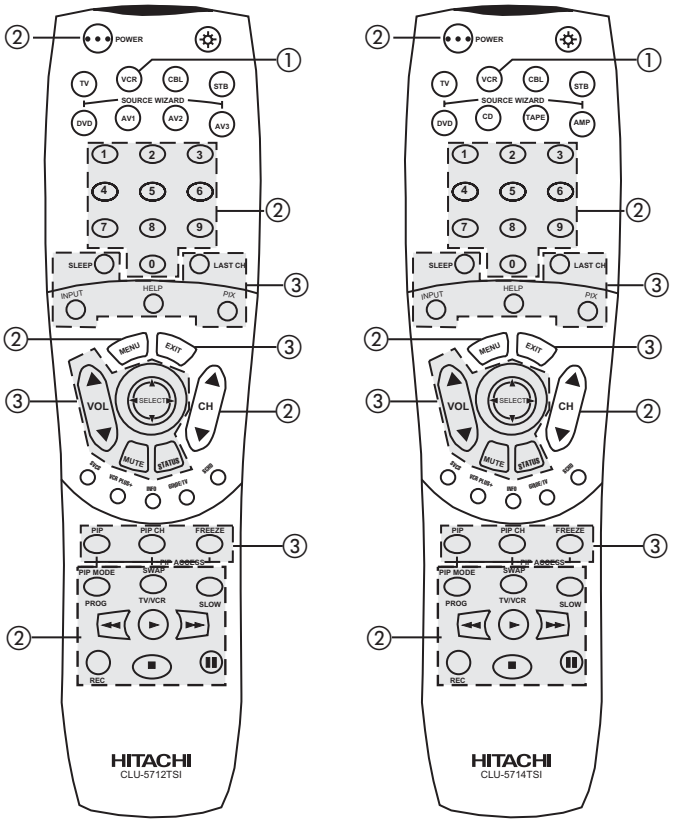
NOTES:

1. If your VCR cannot be operated after performing the above procedures, your VCR s code has not been precoded into the remote.
2. In the unlikely event that your VCR cannot be operated after performing the above procedures, please consult your VCR operating guide.
3. The remote control will remember the codes you have programmed until the batteries are removed from the remote control. After replacing the batteries repeat the entire programming procedure as stated above.
4. The MENU button will act as the VCR MENU button for HITACHI VCRs.
5. The LAST CH button will act as your VCR ENTER button if required.
6. The SLEEP button will act as your VCR 100 button if required.

① **VCR Button**
This button allows the remote to control your VCR by setting it to VCR mode.

② **PRECODED VCR Buttons**
These buttons transmit the chosen precoded VCR codes. For some VCRs, you must press the RECORD button twice to record a program.

③ **EXCLUSIVE TV Buttons**
These buttons are for operating the TV.



MY VCR CODE IS:_____

NOTE: Refer to instruction manual of the VCR for operation of the buttons exclusively for the VCR.

USING THE REMOTE TO CONTROL CABLE BOX FUNCTIONS

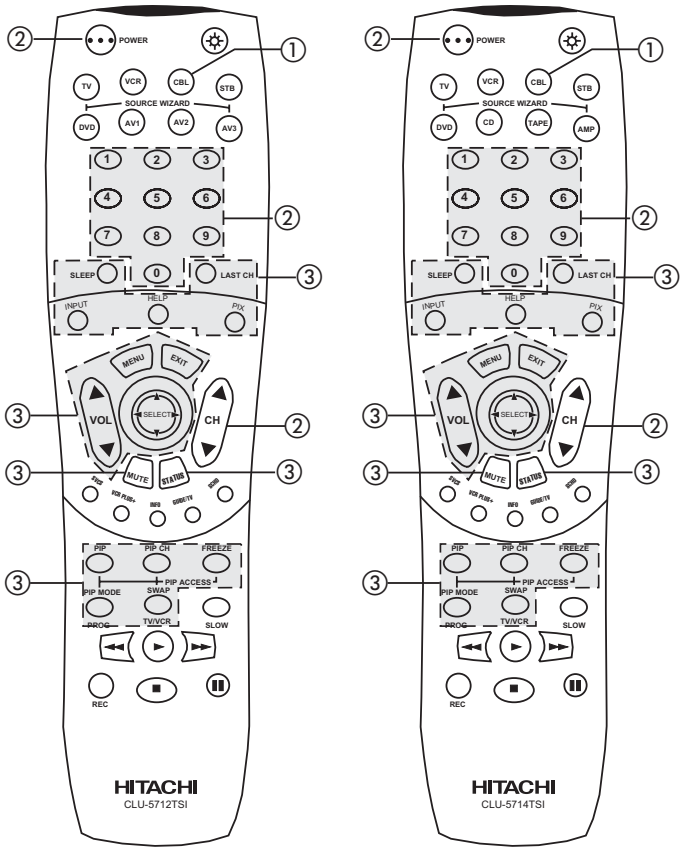
Operating the precoded function for your cable box.

This remote is designed to operate different types of cable boxes. You must first program the remote to match the remote system of your cable box. (refer to page 31)

1. Turn ON your cable box.
2. Aim the remote control at the front of your cable box.
3. Press and release the Cable (CBL) button to switch to Cable pre-coded mode.
4. Hold down the CBL button on the remote and enter the two digit preset code that matches your cable box as shown on page 31. The indicator light will flash 3 times if the code was accepted.
5. Aim the remote at the cable box and press the POWER button. The remote will turn off your cable box when the correct two digit preset code is entered. When this occurs, the remote control is programmed for your cable box. If the cable box does not turn off, try a different two digit preset code.
6. The remote will now control your Cable box.

NOTES:

1. If your cable box cannot be operated after performing the above procedures, your cable box code has not been precoded into the remote.
2. In the unlikely event that your cable box cannot be operated after performing the above procedures, please consult your cable box operating guide.
3. The remote control will remember the codes you have programmed until the batteries are removed from the remote control. After replacing the batteries repeat the entire programming procedure as stated above.
4. The LAST CH button will act as the cable box ENTER button if required.
5. The SLEEP button will act as your cable box 100 button if required.
6. The INPUT button will act as the TV/SAT button when in SAT mode.



① **CABLE (CBL) button**
This button allows the remote to control your cable box by setting it to CABLE mode.

② **PRECODED CABLE BOX buttons**
These buttons transmit the chosen precoded cable codes.

③ **EXCLUSIVE TV buttons**
These buttons are for operating the TV.

MY CABLE BOX CODE IS:_____

NOTE: Refer to instruction manual of the Cable Box for operation of the buttons exclusively for the Cable Box.

USING THE REMOTE TO CONTROL SET-TOP-BOX/SATELLITE RECEIVER FUNCTIONS

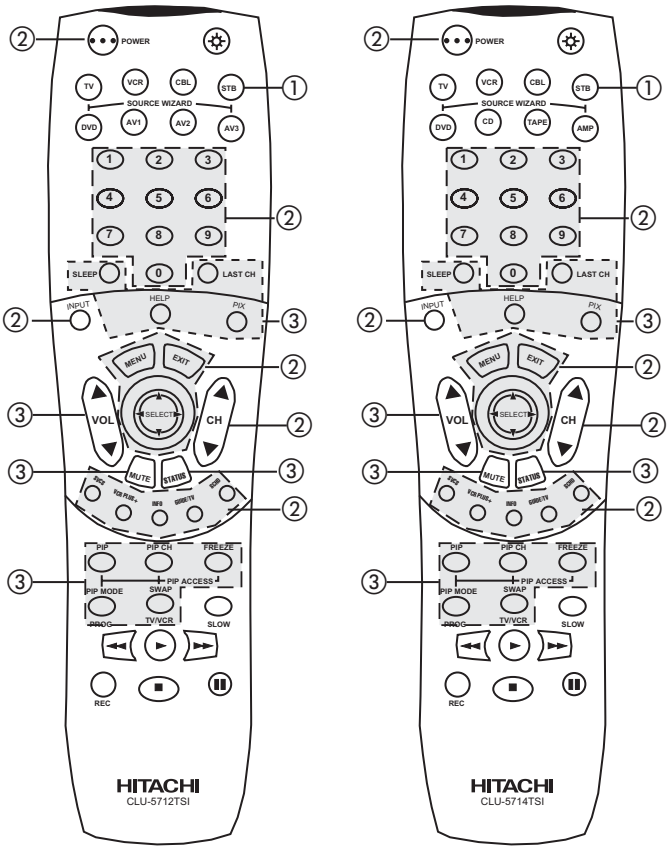
Operating the precoded function for your set-top-box/satellite receiver.

This remote is designed to operate different types of set-top-box/satellite systems. You must first program the remote to match the remote system of your set-top-box/satellite receiver. (refer to page 31)

1. Turn ON your set-top-box/satellite system.
2. Aim the remote control at the front of your set-top-box/satellite system.
3. Press and release the SET-TOP-BOX (STB) button to switch to set-top-box/satellite pre-coded mode.
4. Hold down the STB button on the remote and enter the two digit preset code that matches your set-top-box/satellite receiver as shown on page 31. The indicator light will flash 3 times if the code was accepted.
5. Aim the remote at the set-top-box/satellite receiver and press the POWER button. The remote will turn off your set-top-box/satellite receiver when the correct two digit preset code is entered. When this occurs, the remote control is programmed for your set-top-box/satellite receiver. If the set-top-box/satellite receiver does not turn off, try a different two digit preset code.
6. The remote will now control your set-top-box/satellite receiver.

NOTES:

1. If your set-top-box/satellite receiver cannot be operated after performing the above procedures, your set-top-box/satellite receiver code has not been precoded into the remote.
2. In the unlikely event that your set-top-box/satellite receiver cannot be operated after performing the above procedures, please consult your set-top-box/satellite receiver operating guide.
3. The remote control will remember the codes you have programmed until the batteries are removed from the remote control. After replacing the batteries repeat the entire programming procedure as stated above.
4. The INPUT button will act as the TV/SAT button when in STB mode.



① **SET-TOP-BOX (STB) button**
This button allows the remote to control your set-top-box/satellite receiver by setting it to SET-TOP-BOX mode.

② **PRECODED SET-TOP-BOX buttons**
These buttons transmit the chosen precoded set-top-box codes.

③ **EXCLUSIVE TV buttons**
These buttons are for operating the TV.

MY SET-TOP-BOX CODE IS: _____

NOTE: Refer to instruction manual of the set-top-box/satellite receiver for operation of the buttons exclusively for the set-top-box/satellite receiver.

USING THE REMOTE TO CONTROL DVD FUNCTIONS

Operating the precoded function for your DVD player.

This remote is designed to operate different types of DVD players. You must first program the remote to match the remote system of your DVD player. (refer to page 31 for pre-codes)

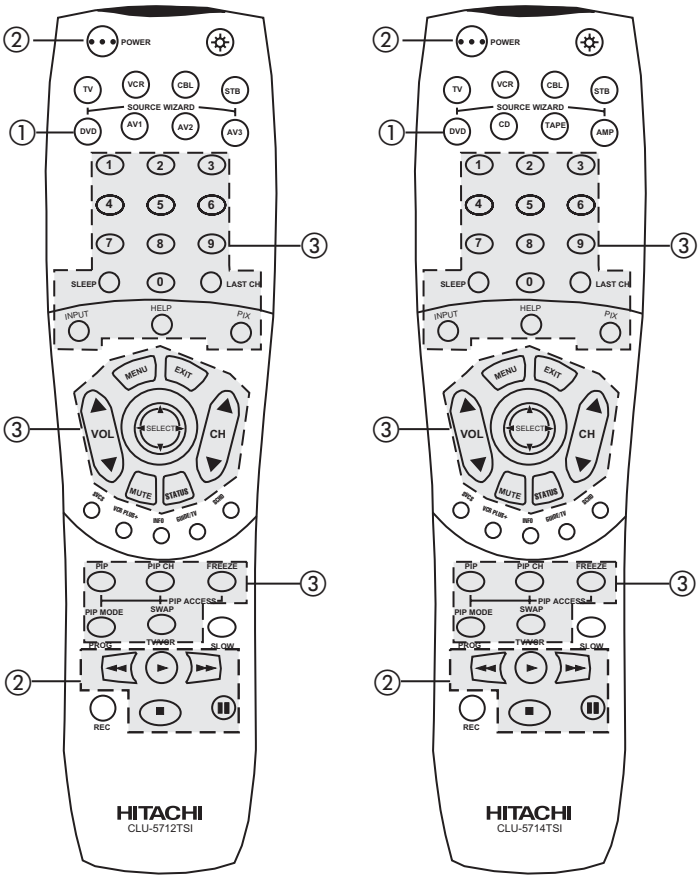
1. Turn ON your DVD player.
2. Aim the remote control at the front of your DVD player.
3. Press and release the DVD button to switch to DVD pre-coded mode.
4. Hold down the DVD button on the remote and enter the two digit preset code that matches your DVD player, as shown on page 31. The indicator light will flash 3 times if the code was accepted.
5. Aim the remote at the DVD player and press the POWER button. The remote will turn off your DVD player when the correct two digit preset code is entered. When this occurs, the remote control is programmed for your DVD player. If the DVD player does not turn off, try a different two digit preset code.
6. The remote will now control your DVD player.

NOTES:
1. If your DVD player cannot be operated after performing the above procedures, your DVD player s code has not been precoded into the remote.
2. In the unlikely event that your DVD player cannot be operated after performing the above procedures, please consult your DVD player operating guide.
3. The remote control will remember the codes you have programmed until the batteries are removed from the remote control. After replacing the batteries repeat the entire programming procedure as stated above.

① **DVD Button**
This button allows the remote to control your DVD player by setting it to DVD mode.

② **PRECODED DVD Buttons**
These buttons transmit the chosen precoded DVD codes.

③ **EXCLUSIVE TV Buttons**
These buttons are for operating the TV.



MY DVD PLAYER CODE IS:_____

NOTE: Refer to instruction manual of the DVD player for operation of the buttons exclusively for the DVD player.

USING THE REMOTE TO CONTROL ADDITIONAL AUDIO/VIDEO EQUIPMENT

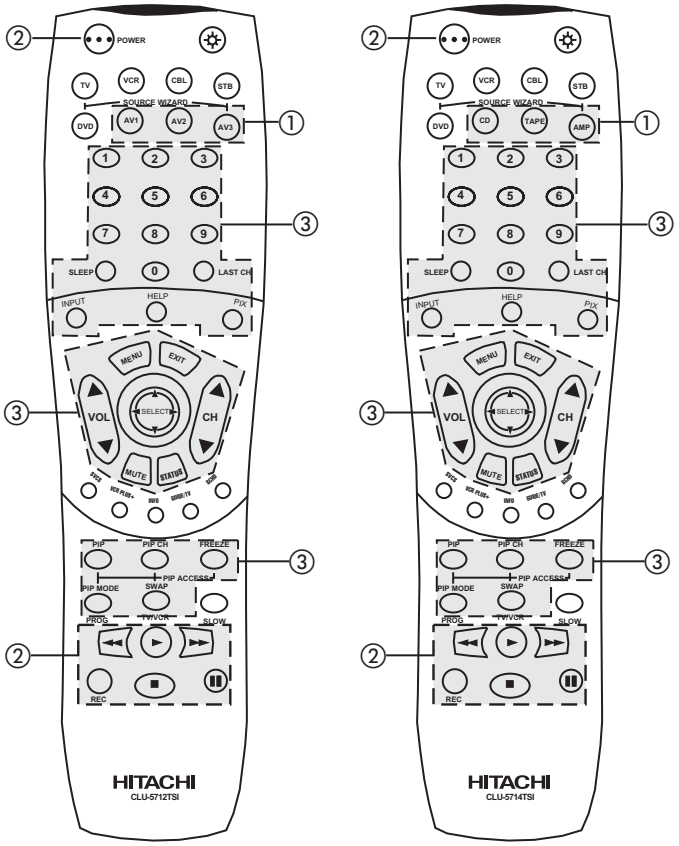
Operating the precoded function for your Audio/Video component.

This remote is designed to operate different types of Audio/Video component. You must first program the remote to match the remote system of your Audio/Video component. (refer to page 31 for pre-codes)

1. Turn ON your Audio/Video component you wish to control with the Remote.
2. Aim the remote control at the front of your Audio/Video component.
3. Press and release the AV1, AV2 or AV3 button to switch to Audio/Video component pre-coded mode.
4. Hold down the AV1, AV2 or AV3 button on the remote and enter the two digit preset code that matches your Audio/Video component, as shown on page 31. The indicator light will flash 3 times if the code was accepted.
5. Aim the remote at the Audio/Video component and press the POWER button. The remote will turn off your Audio/Video component when the correct two digit preset code is entered. When this occurs, the remote control is programmed for your Audio/Video component. If the Audio/Video component does not turn off, try a different two digit preset code.
6. The remote will now control your Audio/Video component.
7. Repeat steps 1 - 6 if you wish to program the remote to control another Audio/Video component. Be sure to use a different A/V button on the remote, since only one component can be programmed per button.

NOTES:

1. Your remote control SOURCE WIZARD buttons are either labeled as AV1, AV2 and AV3, or CD, TAPE, and AMP. If your remote control SOURCE WIZARD buttons are labeled as AV1, AV2, and AV3, please program your Audio/Video components as follow for best performance. Use AV1 to program your CD brand. Use AV2 to program your TAPE brand, and use AV3 to program your AMPLIFIER/RECEIVER brand.
2. If your Audio/Video component cannot be operated after performing the above procedures, your Audio/Video component s code has not been precoded into the remote.
3. In the unlikely event that your Audio/Video component cannot be operated after performing the above procedures, please consult your Audio/Video equipment operating guide.
4. The remote control will remember the codes you have programmed until the batteries are removed from the remote control. After replacing the batteries repeat the entire programming procedure as stated above.



① **AV1, AV2, AV3 Buttons**
These buttons allows the remote to control your Audio/Video equipment by setting it to Audio/Video mode.

② **PRECODED AUDIO/VIDEO Buttons**
These buttons transmit the chosen precoded Audio/Video component codes.

③ **EXCLUSIVE TV Buttons**
These buttons are for operating the TV.

MY AUDIO/VIDEO EQUIPMENT CODE IS:

AV1 (CD) _____
AV2 (TAPE) _____
AV3 (AMP/RCVR) _____

NOTE: Refer to instruction manual of the Audio/Video equipment for operation of the buttons exclusively for the Audio/Video equipment.

VCR, CABLE, SATELLITE, DVD and AUDIO/VIDEO CODES

VCR BRAND. . . . . CODE
Adventura 01
Aiko. 09
Aiwa 01
Akai 02, 47, 48
American High. 23
Asha 44
Audiovox 24
Beaumark 44
Bell & Howell 32
Broksonic. 33, 34, 41
Calix 24
Canon 23
Carver 31
CCE 09, 30
Citizen 09, 24
Colt 30
Craig 19, 24, 30, 44
Curtis Mathes 02, 23, 46
Cybernex. 44
Daewoo 09, 17
Dynatech. 01
Electrophonic. 24
Emerex 08
Emerson 01, 09, 13, 16, 24, 27, 28, 33, 34, 36, 41, 47
Fisher 19, 21, 32
Fuji 10, 23
Funai. 01
Garrard 01
GE. 04, 23, 40, 46
Goldstar. 24, 25, 43
Gradiente 01
Harley Davidson 01
Harmon/Kardon 25
Harwood 30
Headquarter 18
Hi-Q 19
Hitachi 01, 02, 03, 04, 05
Jensen 02
JVC 02, 14, 26
KEC 09, 24
Kenwood 02, 25, 26
KLH. 30
Kodak 23, 24
Lloyd 01
Lloyd s. 27
Logik 30
LXI 24
Magnavox 15, 23, 31, 35
Magnin 44
Marantz 23, 31
Marta. 24
Matsushita. 23
MEI 23
Memorex. 01, 15, 18, 19, 20, 23, 24, 32, 44
MGA 16, 47
MGN Technology 44
Minolta 03, 05
Mitsubishi. 16, 26, 39, 47, 48
Motorola 20, 23
MTC 01, 44
Multitech 01, 30
NEC. 02, 25, 26, 32
Nikko. 24
Noblex. 44
Olympus 12, 23
Optimus 20, 24, 32
Panasonic 11, 12, 23, 38
Penney 03, 23, 24, 25, 44
Pentax. 03, 04, 05
Philco 23
Phillips. 23, 31
Pilot. 24
Pioneer 26
Protec 30
Pulsar 15
Quarter 18
Quartz. 18
Quasar 23
Radio Shack 01, 24
Radix. 24
Randex 24
RCA. 03, 04, 05, 35, 40, 46
Realistic 01, 18, 19, 20, 21, 23, 24, 32, 44
Ricoh. 22
Runco 15
Samsung 17, 44
Sanky 15, 20
Sansui 02, 26
Sanyo 18, 19, 32, 44
Scott 16, 17, 33, 34, 36, 41
Sears 03, 05, 18, 19, 21, 23, 24, 32
Sharp 20
Shintom. 30
Shogun 44
Singer 30
Sony 08, 10, 22, 23
STS. 03
Sylvania. 01, 16, 23, 31
Symphonic 01
Tatung. 02
Teac 01, 02
Technics 23, 38
Teknika 01, 23, 24
TMK 27,44
Toshiba 16, 17, 21, 36
Totvision 24, 44
Unitech 44
Vector 17
Vector Research 25
Video Concepts 17, 47
Videosonic. 44
Wards 01, 03, 19, 20, 23, 30, 35, 36, 44, 46
XR-1000 . . . . . 01, 23, 30
Yamaha. 25
Zenith 10, 15, 22

DVD BRAND. . . . . CODE
Denon 04
Hitachi 07, 12
JVC. 01
Kenwood 04
Magnavox 05
Mitsubishi 10
Panasonic 04
Phillips 06
Pioneer 03
RCA (Proscan) 09
Samsung. 12
Sony 02
Toshiba 05
Yamaha. 08
Zenith 05, 11

CABLE BRAND . . . . . CODE
ABC 01, 07, 08, 17, 18, 20, 36, 37, 49
Antronix. 39
Archer 11, 24, 39
Belcor 32
Cable Star. 32
Century 11
Citizen. 11
Colour Voice 30, 42
Comtronics 25, 28
Contec 21
Dae Ryung 20
Eastern 14
Electricord 31
Everquest 51
Focus 52
Garrard 11
GC Electronics. 32, 39
Gemini 05, 38, 43, 51
General Instrument 01, 12
Goldstar. 10, 25
Hamlin 04, 13, 22, 23
Hitachi. 01
Hytex. 36
Jasco. 11
Jerrold 01, 08, 12, 37, 49, 50, 51
Macom 35
Magnavox 15
Memorex. 03
Movie Time 29, 31, 33
NSC 29, 33, 38
Oak 21, 36, 46
Panasonic 02, 03, 09
Paragon 03
Phillips 11, 15, 16, 26, 30, 42, 43, 44
Pioneer 06, 10, 19
Popular Mechanics 52
Pulsar 03
RCA 02
Realistic 39
Recoton. 52
Regal. 04, 22, 34
Regency 14
Rembrandt. 01, 38
Runco 03
Samsung. 10, 25
Scientific Atlanta. 17, 20, 41, 45
Signal 25, 51
Signature. 01
SL Marx. 25
Sprucer 02
Starcom. 37, 49, 51
Stargate. 25, 51
Starquest. 51
Starsight 53, 54
Sylvania 18
Teleview 25
Texscan. 18
Tocom 07, 27, 50
Toshiba 03
Tusa 51
TV 86 29
Unika. 11, 39
United Artists. 36
United Cable 49
Universal 11, 24, 31, 32, 34, 39
Videoway 47
Viewstar. 15, 28, 29, 40
Zenith 03, 48
Zentek. 52

SATELLITE BRAND . . . . . CODE
Echostar 04
Hitachi. 01
Hughes 05
RCA 02
Sony 03

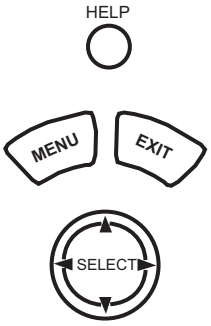
SET-TOP-BOX . . . . . CODE
Panasonic 06
RCA 07
Samsung. 08

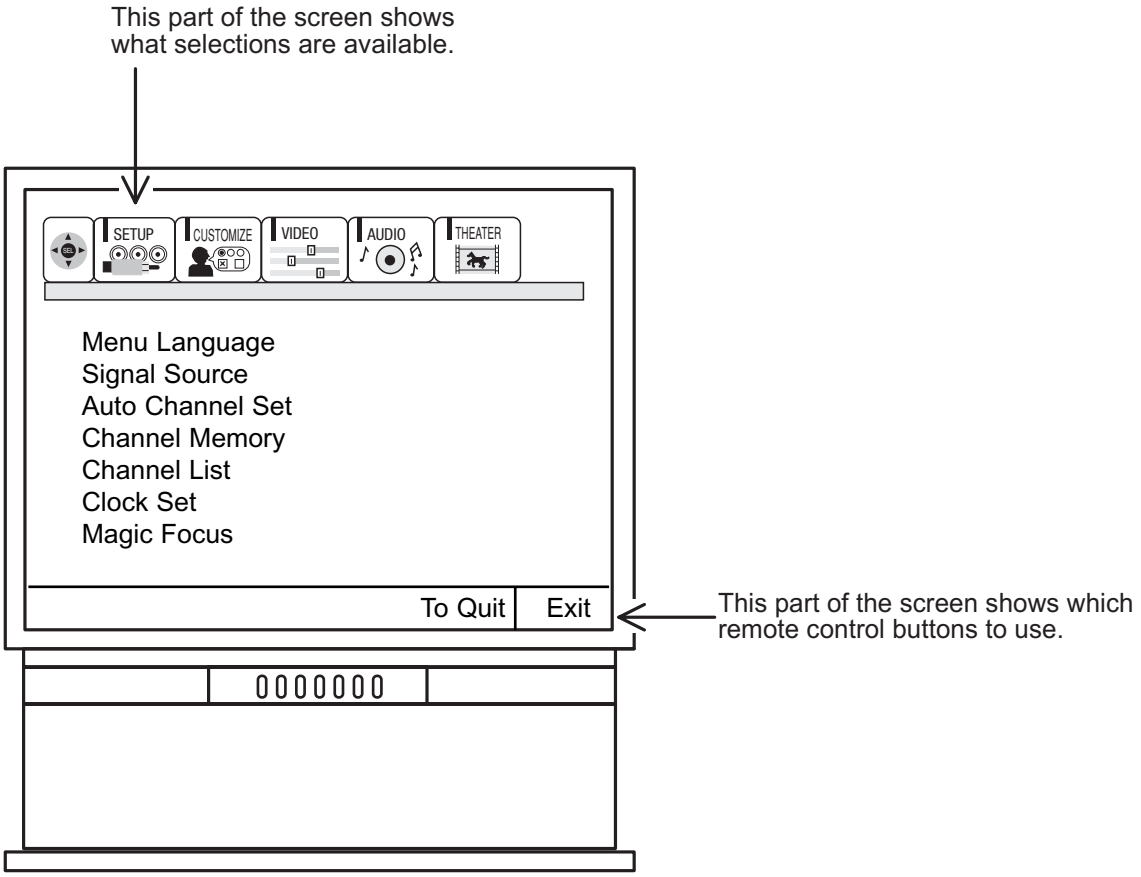
AMPLIFIER BRAND . . . . . CODE
Aiwa 05, 06
Carver 01, 06, 08
Denon 10
Fisher 08, 11
Hitachi. 12
JVC. 13
Kenwood 14, 15, 17, 18
Magnavox 01, 06
Marantz 01, 06, 16
MCS 16
Optimus 03, 04, 11, 15, 20
Panasonic 16
Philips 01, 06
Pioneer 03, 04, 20, 21, 22
Quasar 16
Sansui. 06
Sanyo 11
Sharp 15
Sony 05
Technics. 02, 16, 23, 24, 25
Victor. 13
Wards 03, 05, 06, 08, 20, 21
Yamaha. 15, 26

CD BRAND. . . . . CODE
Adcom. 01
Aiwa 02
California Audio Lab 03
Carver 02
Denon 04
DKK 05
Emerson 01
Fisher 06
Genexxa 07
Hitachi 01, 07, 08, 09, 10, 11, 12
JVC. 13
Kenwood 06, 14, 15
Krell 02
Magnavox 02
Marantz 02, 03
MCS 03
Mission 03
NSM 02
Onkyo 16
Optimus. 05, 07, 17
Panasonic 03
Philips 02
Pioneer 07, 17
Proton 02
QED 02
Quasar 03
RCA 01, 21
Realistic 01
Rotel 02
SAE 02
Sansui. 02
Scott 01
Sony 05, 18
Technics 03, 19, 20
Victor. 13

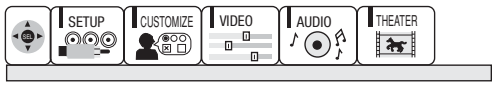
TAPE BRAND. . . . . CODE
Aiwa 11, 12
Hitachi 01, 02, 03, 04
JVC. 05
Kenwood. 06
Optimus. 07
Pioneer 07
Sony 09, 10, 11, 12
Wards 07

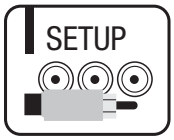
1. Press MENU on the remote control to display the different features on your HITACHI Projection TV.
2. Press the THUMB STICK to highlight a different feature.
3. Press EXIT on the remote control to quickly exit from a menu.
4. Press HELP on the remote control when a menu is displayed, and text will appear giving a description of that menu.



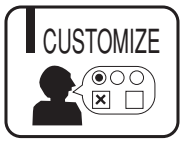


ULTRATEC OSD

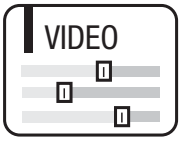




Menu Language	Choose English, French, or Spanish text.
Signal Source	Select Antenna or Cable TV.
Auto Channel Set	First time set up for channel buttons.
Channel Memory	Channel buttons, add, skip.
Channel List	Check channel name, scan, and child lock.
Clock Set	Set before using timer features.
Magic Focus	Automatically match red, green, and blue colors to make white.

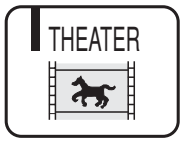


Channel Id.	Label channels PAY1, ABC, etc.
Video Id.	Label video inputs VCR1, DVD1, etc.
Family Favorites	Allows you to set and view favorite channels.
Parental Control	Block channel picture and sound.
4 Event Program	Turn TV on and off once, daily, or weekly.
Auto Link	Automatically turn TV on with VIDEO:4 input.
Closed Caption	Feature to display dialogue/text.
Menu Background	Select from two types of backgrounds.

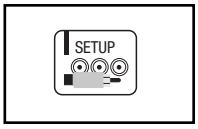


Contrast	Adjust contrast.
Brightness	Adjust brightness.
Color	Adjust color.
Tint	Adjust tint.
Sharpness	Adjust sharpness.
Reset	Set VIDEO settings to factory preset.
Advanced Settings	Improve picture performance.

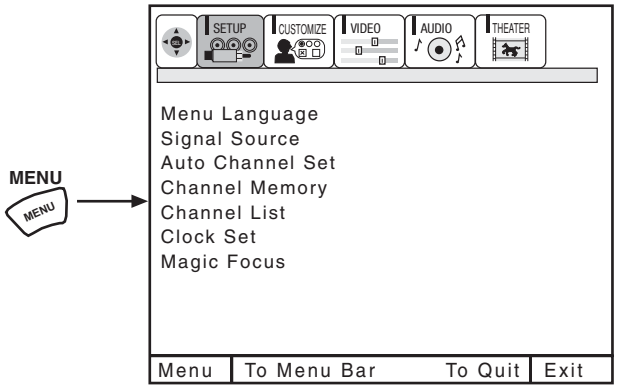
Bass	Adjust bass.
Treble	Adjust treble.
Balance	Adjust balance.
Reset	Set AUDIO settings to factory preset.
Advanced Settigns	Improve sound performance.



Theater Modes	Picture and sound are automatically set.
Surround	Special Sound effects with SRS Technology.

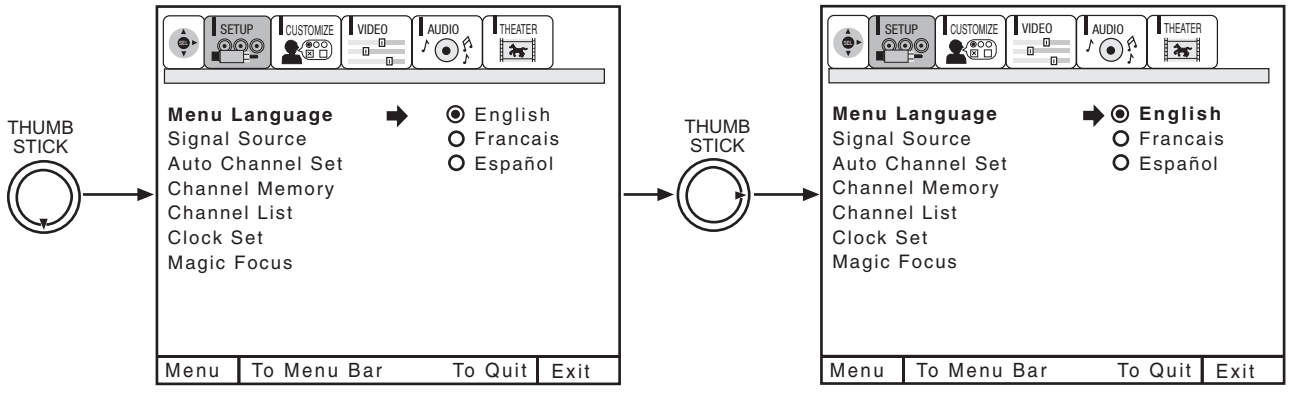


Select SETUP when setting your TV up for the first time. Use the CURSOR ▲ or ▼ on the remote to highlight the function desired.



NOTE: To see an auto-demonstration of the on-screen displays with HELP text displayed, press and hold the POWER button on the TV set for approximately five seconds. Press the EXIT button to end the auto-demonstration.

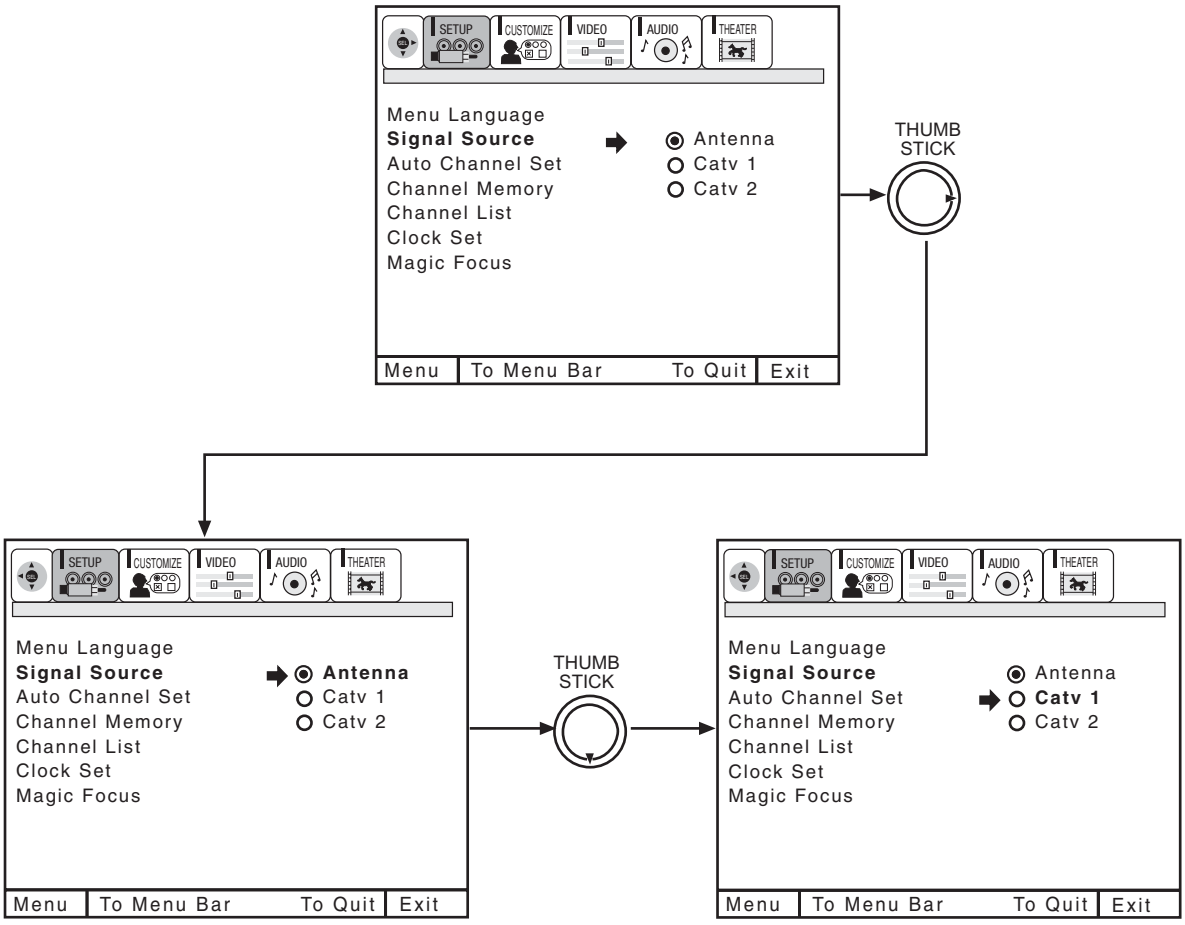
MENU LANGUAGE This feature will allow you to select any one of three different languages for all on-screen displays.



Use THUMB STICK ▲ or ▼ to select the MENU LANGUAGE of your choice.
Press down on THUMB STICK to select the language of your choice.
Press EXIT to quit menu or THUMB STICK ◄ to return to previous menu.

SET UP

SIGNAL SOURCE Select ANTENNA if you are using an indoor or outdoor antenna. Select CATV if you have cable TV.



Press THUMB STICK ▲ or ▼ to highlight the signal source and press down on THUMB STICK to select the correct SIGNAL SOURCE mode.
Press EXIT to quit MENU or THUMB STICK ◄ to return to previous menu.

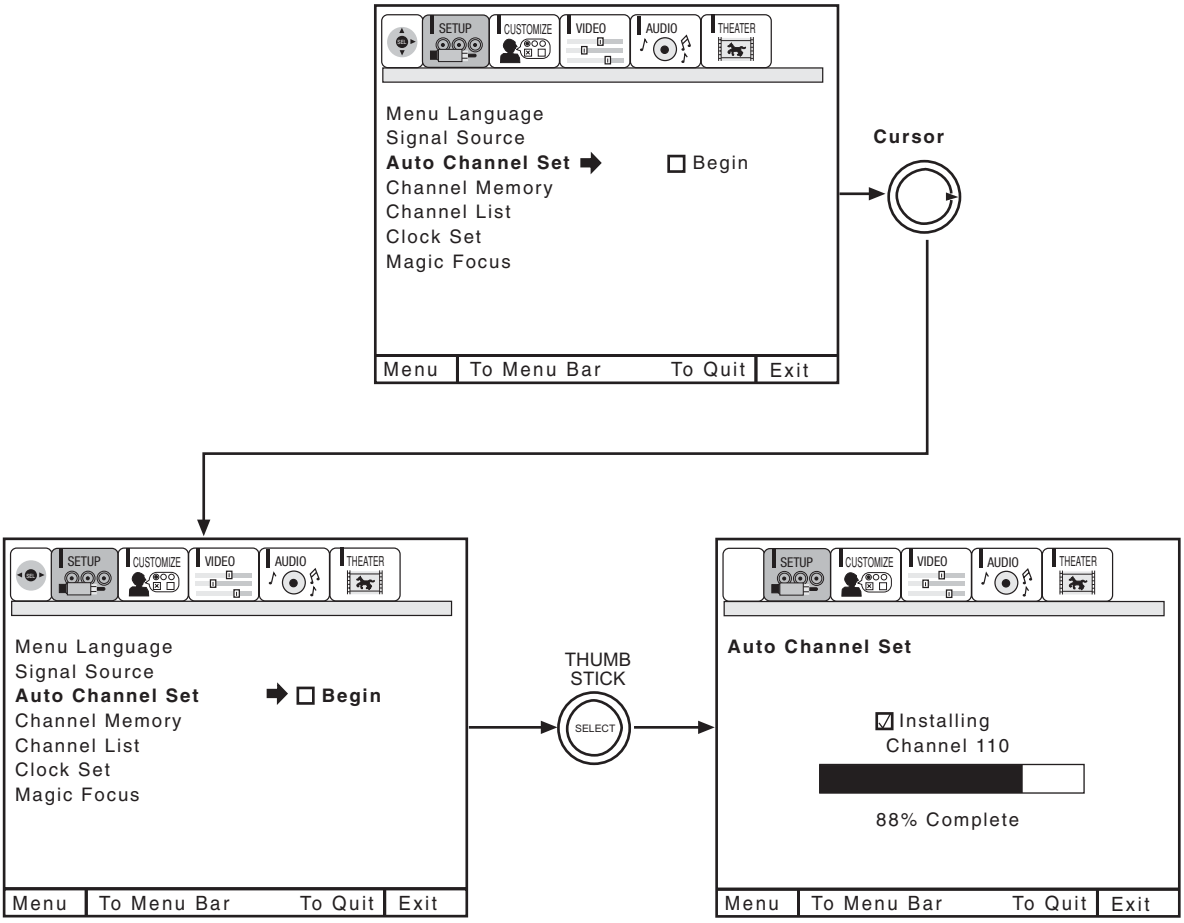
RECEPTION BAND		
AIR	CATV 1 OR CATV 2	
	CATV CHANNEL	Indicated on the screen
VHF 2 ~ 13ch UHF 14 ~ 69ch	VHF 2~13	2 ~ 13
	Mid band A~1 A-5 ~ A-1	14 ~ 22 95 ~ 99
	Super band J~W	23 ~ 36
	Hyper band W + 1 ~ W + 28	37 ~ 64
	Ultraband W + 29 ~ W + 84	65 ~ 125

Reception channels for each mode are shown at the left.

Refer to your cable or TV guide for channel identification standards.

If certain CATV channels are poor or not possible in CATV1 mode, set SIGNAL SOURCE to CATV2.

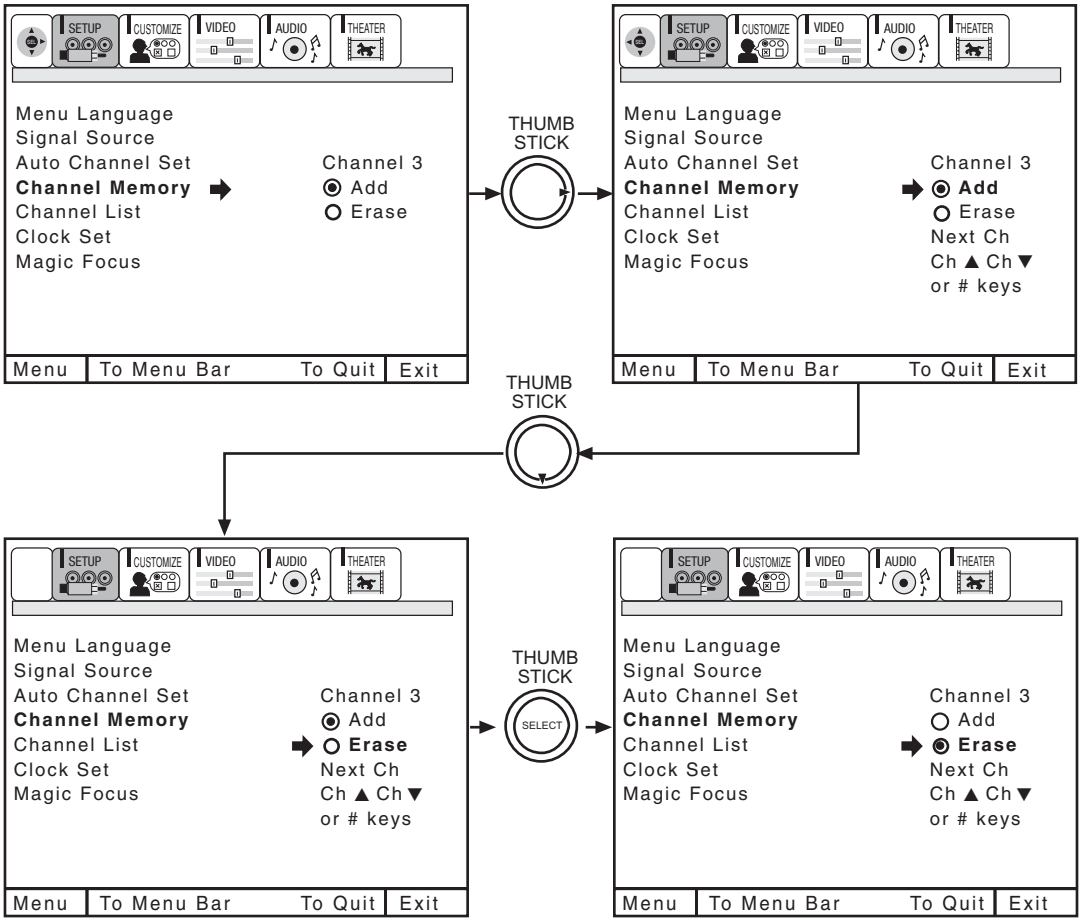
AUTO CHANNEL SET This feature will automatically store active TV channels in CHANNEL MEMORY. This will allow you to skip unused channels when using CHANNEL UP (▲) or DOWN (▼).



If the EXIT button is pressed while the AUTO CHANNEL SET function is engaged, programming will stop.

Remember to select the correct SIGNAL SOURCE mode before using AUTO CHANNEL SET.
See CHANNEL MEMORY to add or erase additional channels.

CHANNEL MEMORY Use this function after AUTO CHANNEL SET to add or erase additional channels to the remote control CHANNEL ▲ or ▼ buttons.

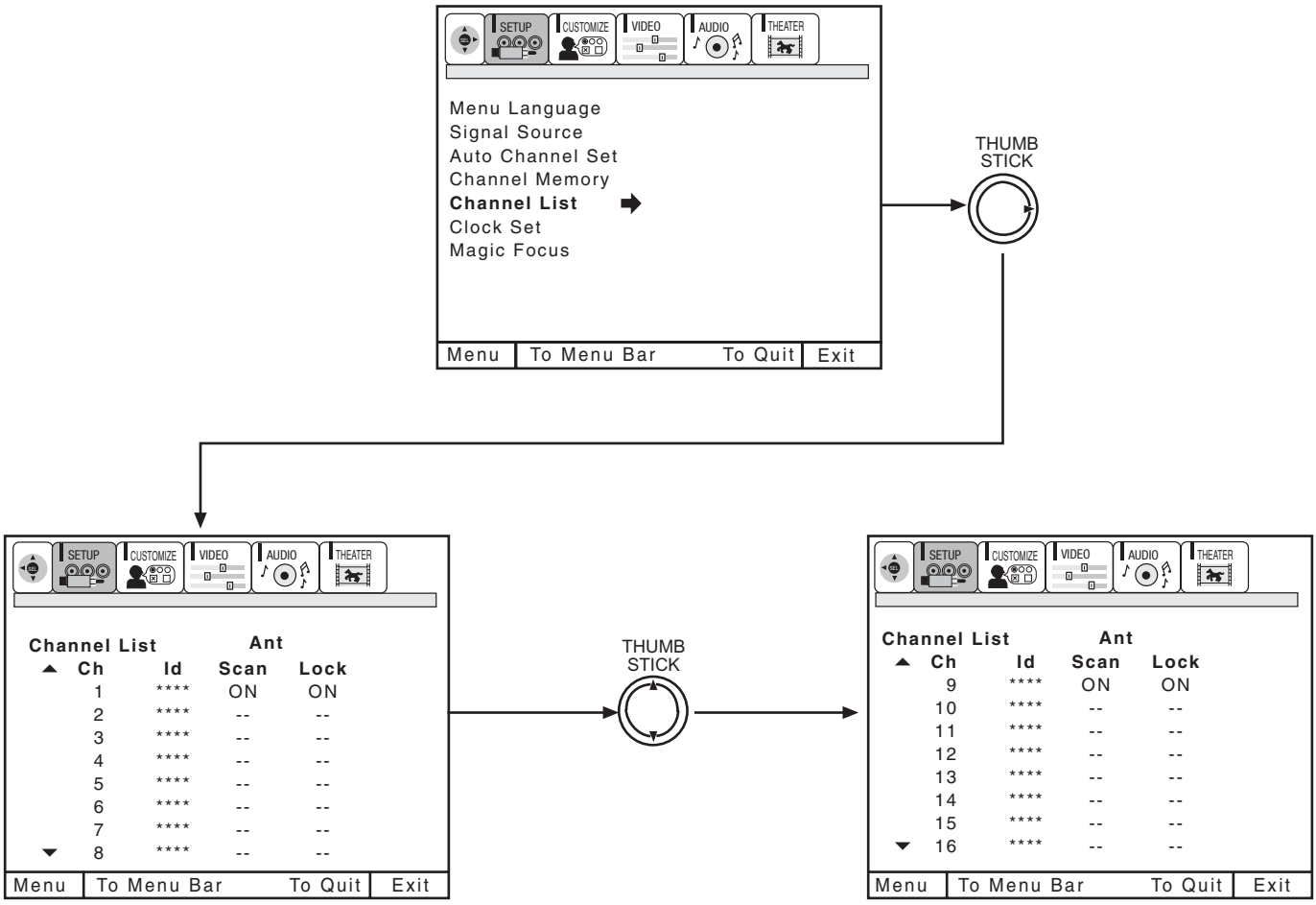


To add or erase additional channels while still in CHANNEL MEMORY use CHANNEL ▲ or ▼, or the number buttons to change the channel.

Press EXIT to quit menu or THUMB STICK ◄ to return to previous menu.

CHANNEL LIST

This function allows you to review which channels are labeled in CHANNEL ID (ID.), which have been added to CHANNEL MEMORY (SCAN), and which are protected by PARENTAL CONTROL (LOCK).



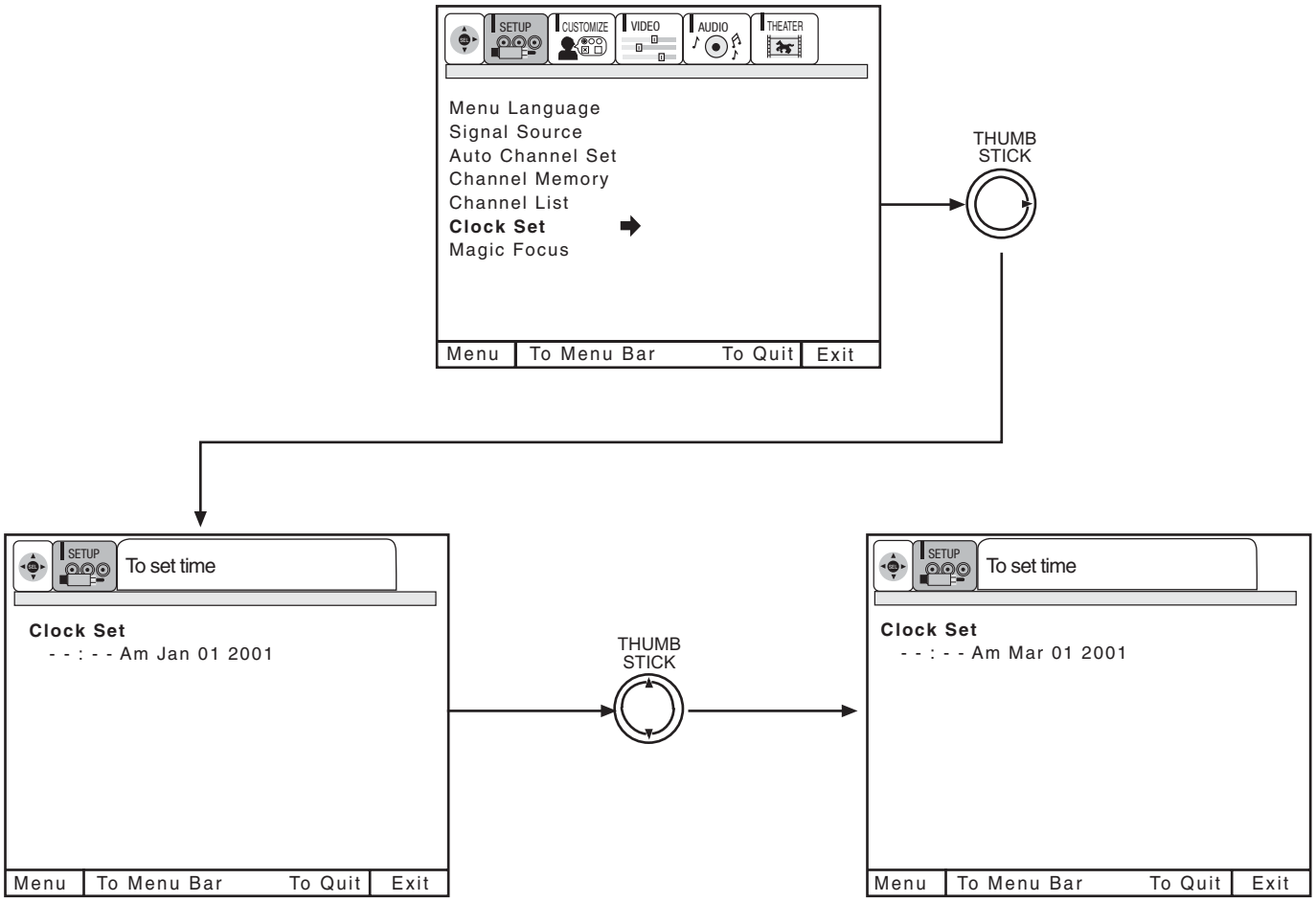
Press THUMB STICK ▲ or ▼ to review more channels.
Press EXIT to quit menu or CURSOR ◄ to return to previous menu.

NOTE: Each touch of THUMB STICK ▲ or ▼ will display the next eight channels.

SET UP

CLOCK SET

The time must be set before you can use the 4 EVENT PROGRAM or TV TIME OUT.



Use THUMB STICK ▲ or ▼ to set the time, date, and year.
Press THUMB STICK ◄ or ► to change position.
Press EXIT to quit menu or THUMB STICK◄ to return to previous menu when the CURSOR is in the first position.

MAGIC FOCUS

Please turn on your television for at least 20 minutes before using this feature.

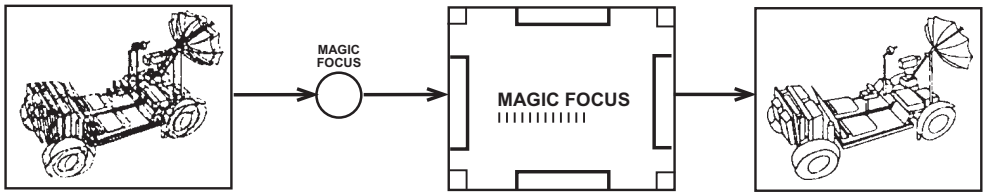
Your HITACHI Projection TV has three color projection tubes: one for red, one for green, one for blue. When mixed together in the proper proportion, the output of these three color tubes can produce any color. To produce these colors, however, the beams must be precisely aligned over each other so that the colors can be mixed. The process of aligning these picture beams is called convergence .

Over a period of time, the picture tubes can drift out of alignment due to normal bumps and vibrations or moving the TV. If you move your TV, or if, after a time, you notice color rings or halos around objects in the picture, you may want to converge (align) the colors.

Properly converged, the lines appear white, which is actually a combination of the outputs of the three color tubes. The output of the green tube is stationary. The outputs of the red and blue tubes can be adjusted. When properly aligned, the outputs of all three tubes should be directly over each other to produce the white lines.

To simplify convergence, HITACHI incorporates a function called MAGIC FOCUS located on the front control panel, which allows the TV to self-adjust. Press this MAGIC FOCUS button and the convergence self adjustment willl start and this process will take approximately 15 seconds. If this button is pressed during this process, no change in picture quality will occur. After this 15 second self-adjust period, picture quality will be optimum. (Do not move the TV during self-adjust.)

You may also select MAGIC FOCUS from the SETUP Menu.



NOTES:

1. For Magic Focus to perform at it s best, the television must be turned ON and heat run for a minimum of 20 minutes before pressing Magic Focus on the front panel.

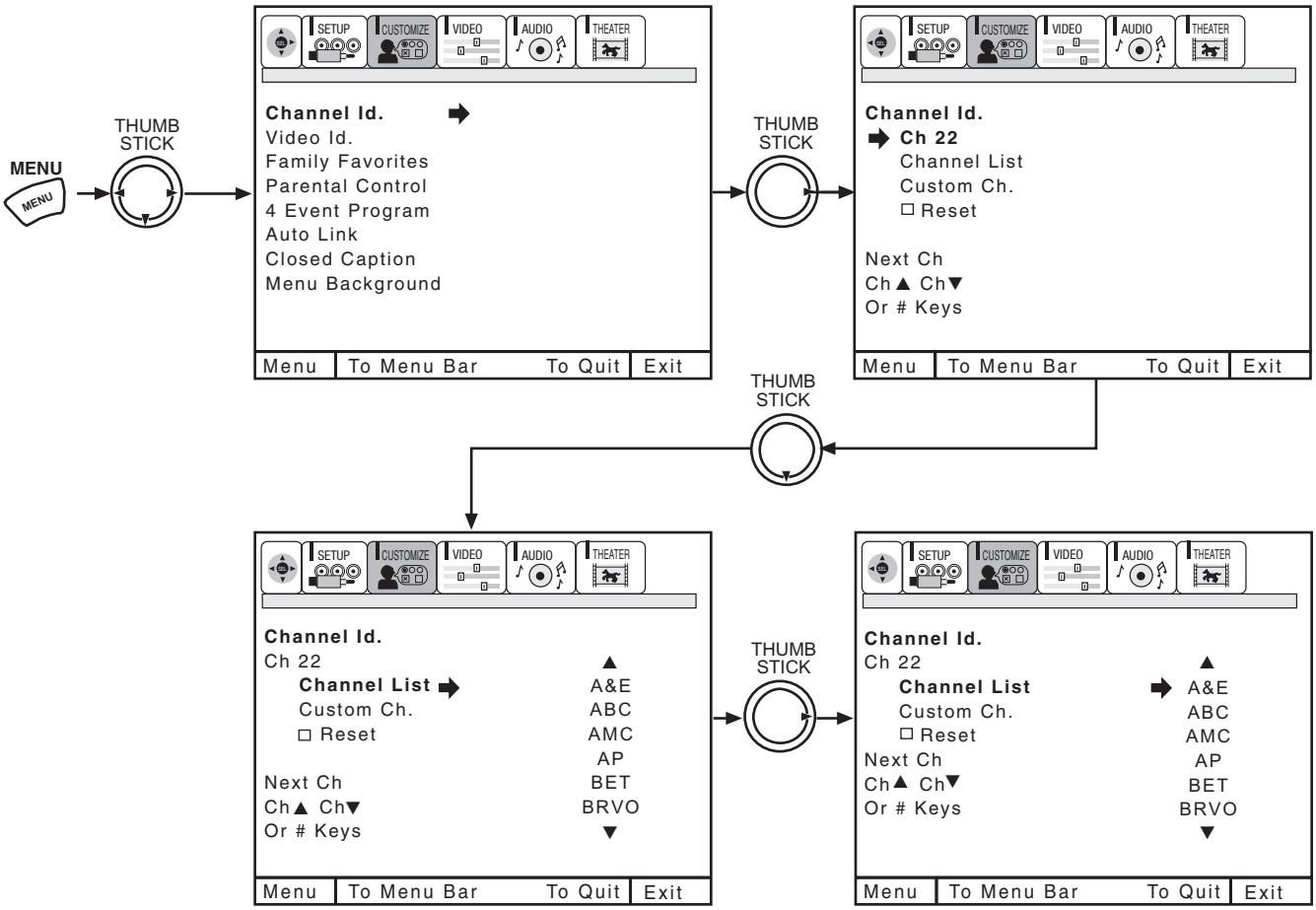
2. Only a momentary press of the MAGIC FOCUS button is necessary to start AUTO DIGITAL CONVERGENCE. At anytime during this convergence correction process, you may press the MAGIC FOCUS button to exit the MAGIC FOCUS mode.

CUSTOM

This selection contains advanced features which will make TV viewing easier and more enjoyable.

CHANNEL ID

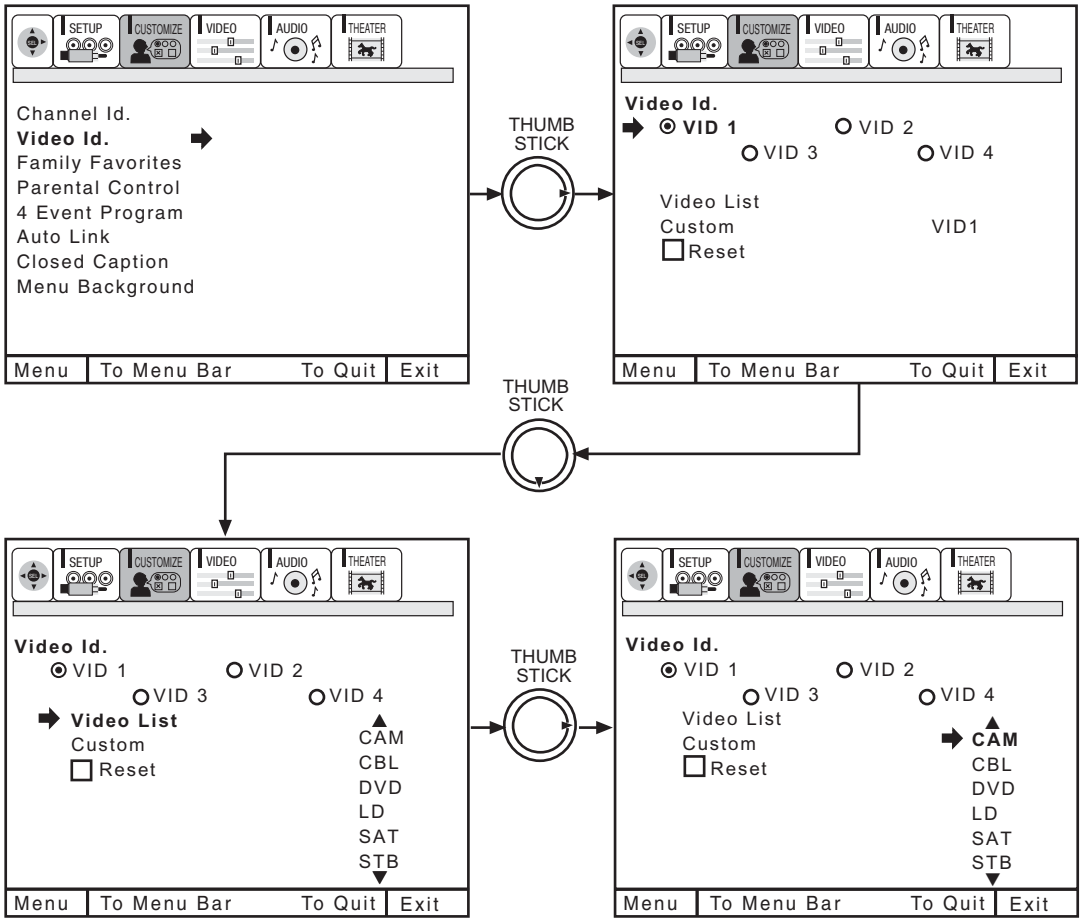
Use this feature to give up to 20 channels a name when ANTENNA signal source is selected and up to 60 channels a name when CATV1 signal source is selected.



Press THUMB STICK ▼ to select CHANNEL LIST.
Press THUMB STICK ▶ to select preset CHANNEL LIST.
Press THUMB STICK ▼ to scroll through the preset CHANNEL LIST.
Press down on THUMB STICK to select desired CHANNEL ID.

To customize CHANNEL ID, select CUSTOM CH.
Press THUMB STICK ▲ or ▼ to select letter.
Press THUMB STICK ◀ or ▶ to change character position.
(✱) represents a blank space.
Press THUMB STICK ▲ or ▼ and the number buttons to label additional channels.
Select ERASE to erase a CHANNEL ID.
Press EXIT to quit menu or THUMB STICK ◀ to return to previous menu when the CURSOR is in the first position.

VIDEO ID. Use this feature to give a name to any of the four video inputs.



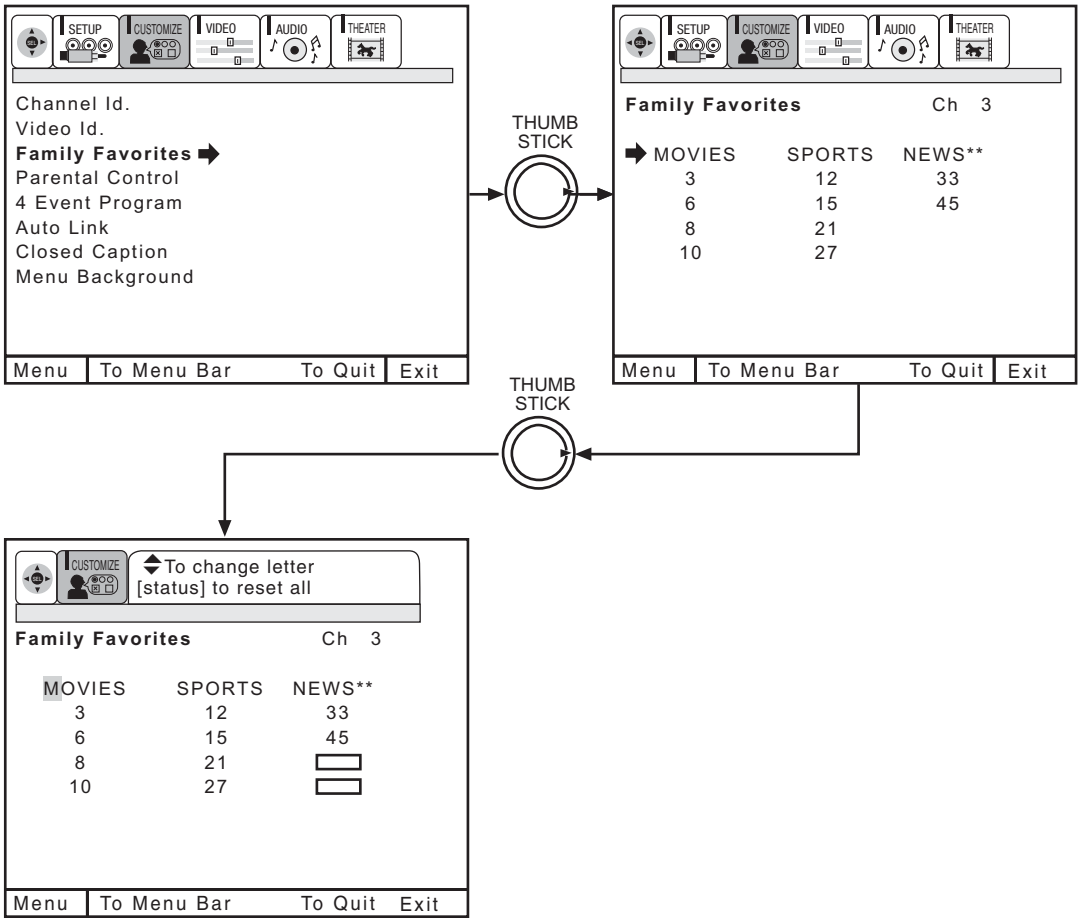
Press THUMB STICK ▼ to select VIDEO LIST.
Press THUMB STICK ▶ to select preset VIDEO LIST.
Press THUMB STICK ▲ or ▼ to scroll through the preset VIDEO LIST.
Press down on THUMB STICK to select desired VIDEO ID.
To customize VIDEO ID, select CUSTOM.
Press THUMB STICK ▲ or ▼ to select letters.
Press THUMB STICK ▶ or ◀ to change position.
Press EXIT to quit menu or THUMB STICK ◀ to return to previous menu when the CURSOR is in the first position.

(✱) represents a blank space.
Select RESET to set VIDEO ID to original condition.

NOTE: VIDEO ID will be displayed only when VIDEO input is displayed as main picture.

FAMILY FAVORITES (MENU)

This function allows you to group your favorite channels into six personalized categories that you can rename. A total of 24 channels can be stored in the FAMILY FAVORITES function.



To rename the categories, use the THUMB STICK to highlight the category you would like to rename.
Use THUMB STICK ▲ or ▼ to change a letter and THUMB STICK ► to select the next character to change.

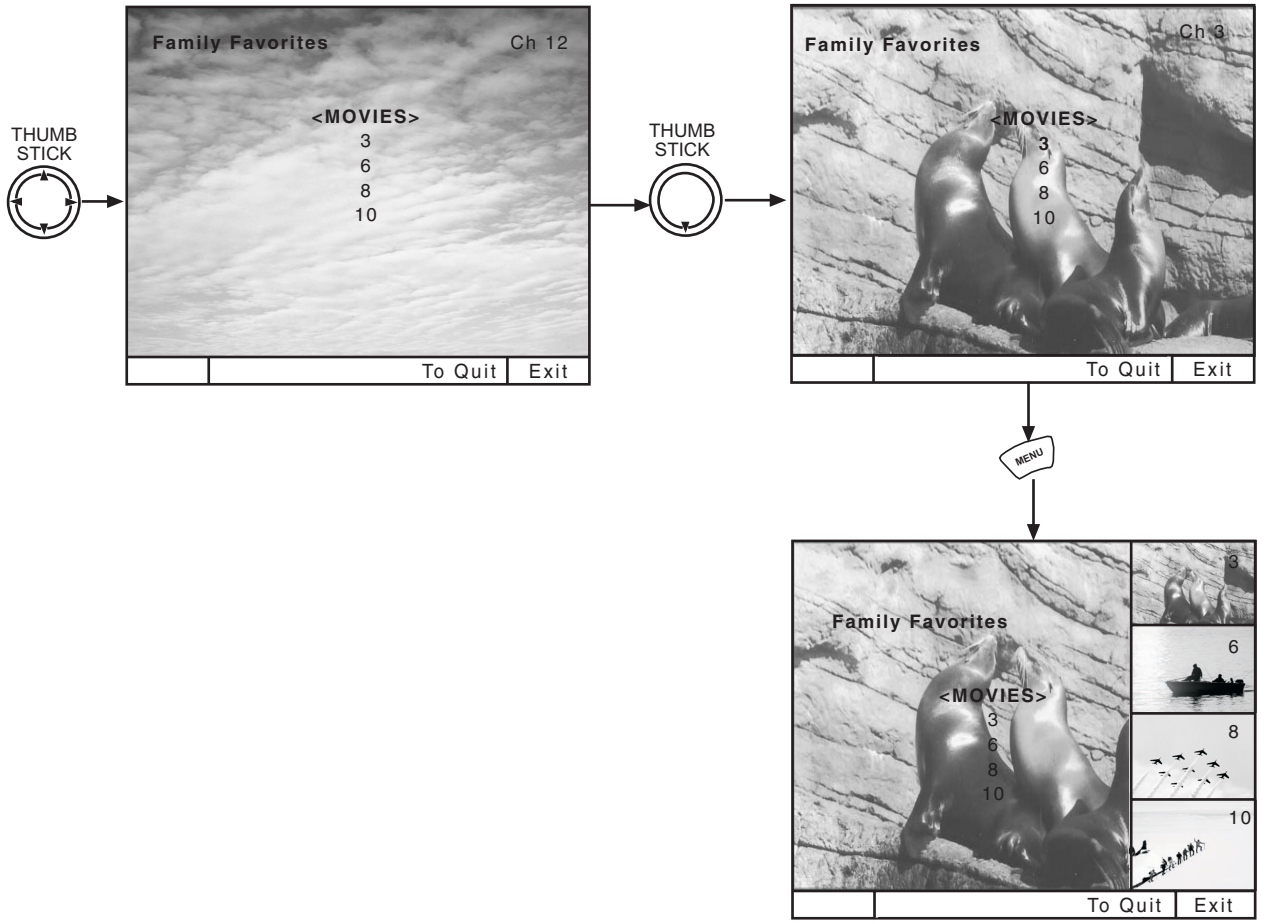
To enter a channel into a category, highlight the channel location to be stored.
Press CHANNEL ▲ or ▼ or the number buttons to enter the desired channel. Repeat until category has been set with your favorite channels. The channel to be added is displayed in the top right corner of the screen.
Enter channel 00 to erase a favorite channel.

To reset categories and channels back to original factory preset, press STATUS while you are renaming a category.

NOTES: 1. This function cannot be accessed when ANT B is the main channel.
2. When the input source is not ANT A, the message PLEASE SWITCH TO ANT A will appear.

FAMILY FAVORITES (OPERATION)

Use this function to display FAMILY FAVORITES selection to tune the main picture to a desired favorite channel.



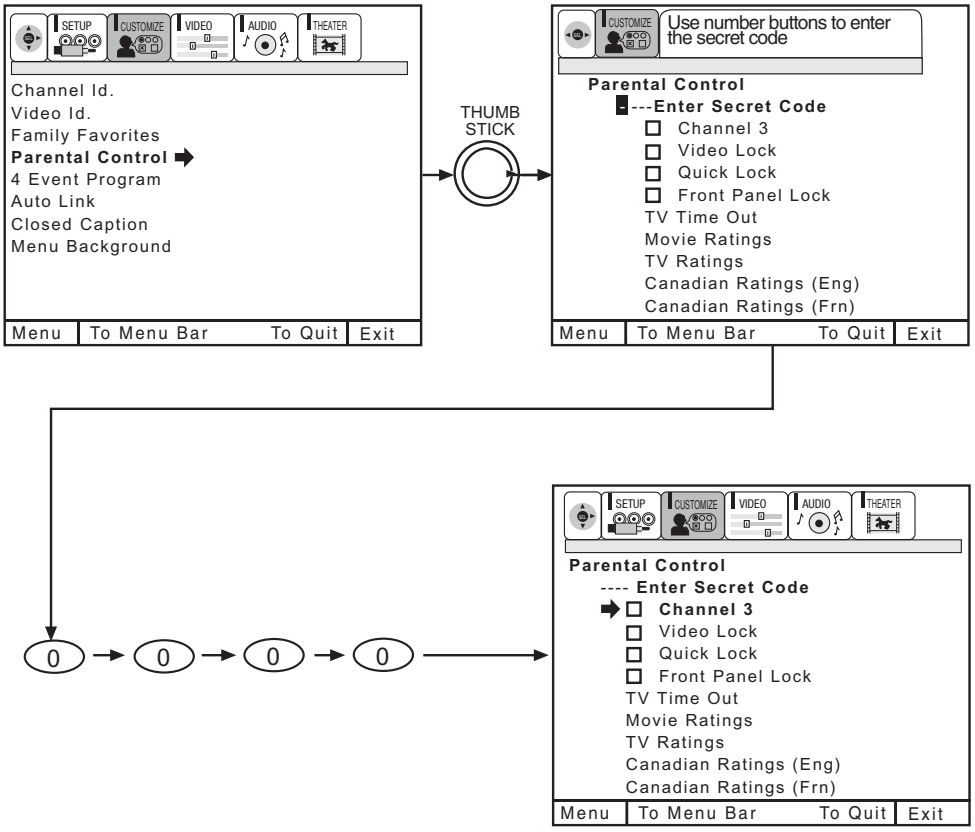
Select a category using THUMB STICK ◄ or ► buttons.
Press MENU and the category will be displayed as sub-pictures at the right edge of the screen.This is useful for previewing a category.
Use THUMB STICK ◄, ►, ▲ or ▼ buttons to highlight a favorite channel and the TV will automatically tune to that channel.
Press EXIT to remove FAMILY FAVORITES OSD from the screen.

NOTE: If a category has some blank channel entries, these channels will appear as black sub-pictures.

CUSTOM

PARENTAL CONTROL This function will block out the picture and sound of the selected channel or video input. It can also be used to keep the TV from being viewed for a scheduled amount of time that you set.

The code to enter PARENTAL CONTROL is a four digit secret code number. The factory preset code is 0000.
Use the number buttons to select secret code.



Use THUMB STICK ▲ or ▼ to highlight function and then press down on THUMB STICK to set ON or OFF.

When CHANNEL is turned on, the picture and sound for the chosen channel will be blocked out.

When VIDEO LOCK is turned on, the picture and sound for all video inputs will be blocked out. To lock the video inputs, you must be tuned to any video input.

When QUICK LOCK is turned on, the picture and sound for channels 3, 4 and all video inputs will be blocked out.

When FRONT PANEL LOCK is turned on, all buttons on the Front Panel will be deactivated, except the Power button.

When TV TIME OUT is turned on, you can set the BEGIN and END times and the TV cannot be viewed during that time period. (Set clock first.) Use THUMB STICK ▲ or ▼ to highlight ONCE (TV will time out one time only), DAILY (TV will time out every day), WEEKLY (TV will time out one time a week) or OFF (to disable this function) and then press SELECT to select your choice.

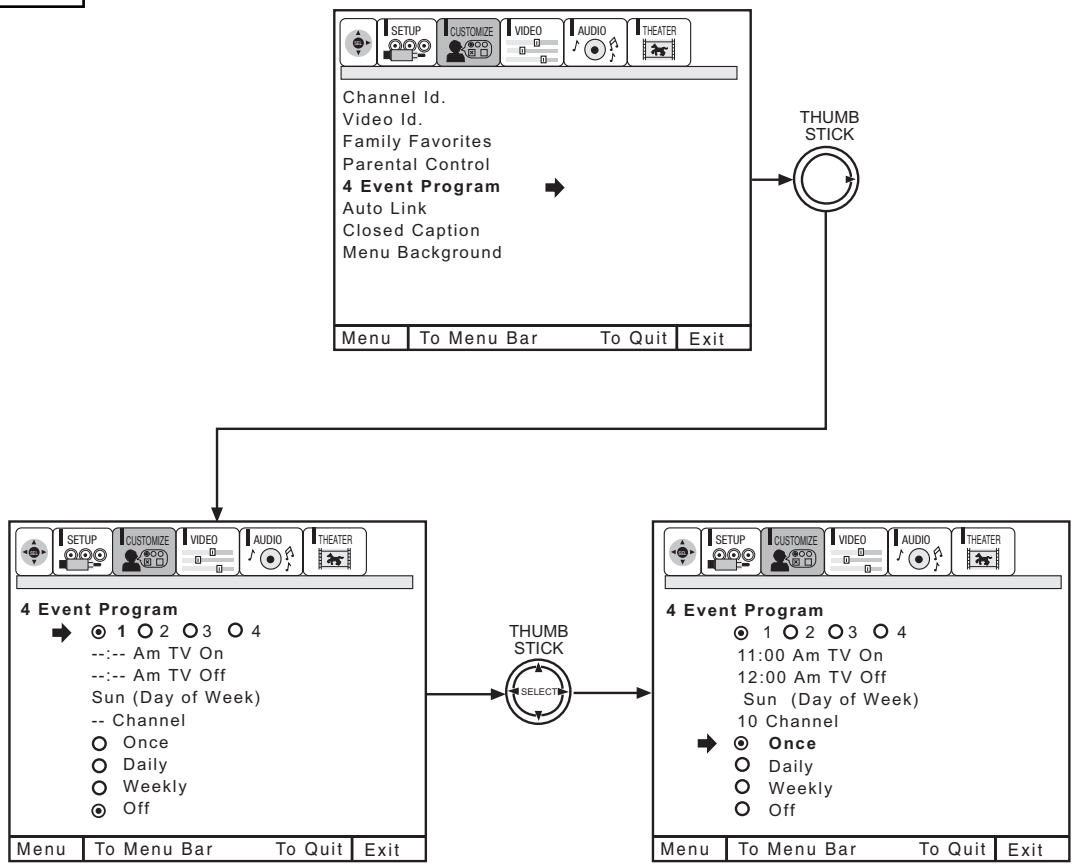
MOVIE/TV RATINGS are explained in detail in the Parental Control Movie/TV Ratings Reference Guide.

To change the secret code number, select CHANGE SECRET CODE. Enter a new four digit key number you prefer.

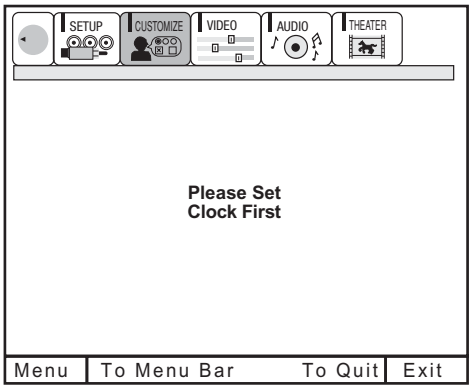
If you forget your secret code, use the factory code 7777 to erase your key number. This will reset the secret code number back to the factory preset 0000.
Press EXIT to quit menu or THUMB STICK ◄ to return to previous menu.

NOTE: When using TV TIME OUT make sure the clock is set (see page 39).

4 EVENT PROG. This function will automatically turn the TV on and off, one time only, every day or once a week.



Press THUMB STICK ▶ then press SELECT to select PROGRAM 1, 2, 3, or 4.
Press THUMB STICK ▲ or ▼ to select the time the TV will turn on and off.
Use THUMB STICK ▶ to change position.
Press THUMB STICK ▲ or ▼ to highlight then press down on THUMB STICK to select MODE: ONCE (TV will turn on/off one time only) or MODE: DAILY (TV will turn on/off at the same time every day), or MODE: WEEKLY (TV will turn on/off at same time every week) and MODE: OFF (to disable this function).
Press THUMB STICK ▲ or ▼, CHANNEL (▲) or (▼), or number buttons to set the channel the TV will tune to when it automatically turns on.
Press EXIT to quit menu or THUMB STICK ◀ to return to previous menu.
If the clock is not set, you can not use this function and the screen below will appear.

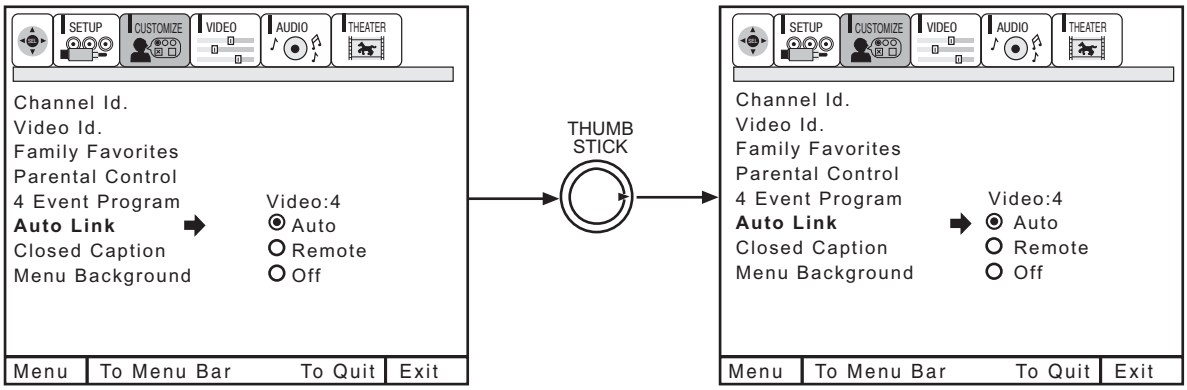


NOTE: If no remote control button is pressed after ON Timer is activated, the TV will automatically turn off after three hours.

CAUTION: Do not use your TV as a deterrent when away from home by using the ON and OFF TIMERS. For safety, the TV should be turned off when you are away from home.

CUSTOM

AUTO LINK Use this function to automatically turn the TV on and tune to VIDEO: 4 when it detects a VIDEO input.



Use THUMB STICK ▲ or ▼, then press down on THUMB STICK, to change AUTO LINK setting.

When AUTO is selected, the TV will turn on and tune to VIDEO: 4 automatically, when the VIDEO: 4 input device is turned on. This is convenient when you want to watch a movie with your VCR, laserdisc player, or DVD player.

When REMOTE is selected, the TV will turn on and tune to VIDEO: 4 automatically, when the VIDEO: 4 input device is turned on and the VCR, laserdisc, or DVD play button on your remote control is pressed.
This is convenient when you want to record a movie with your VCR and watch it later.

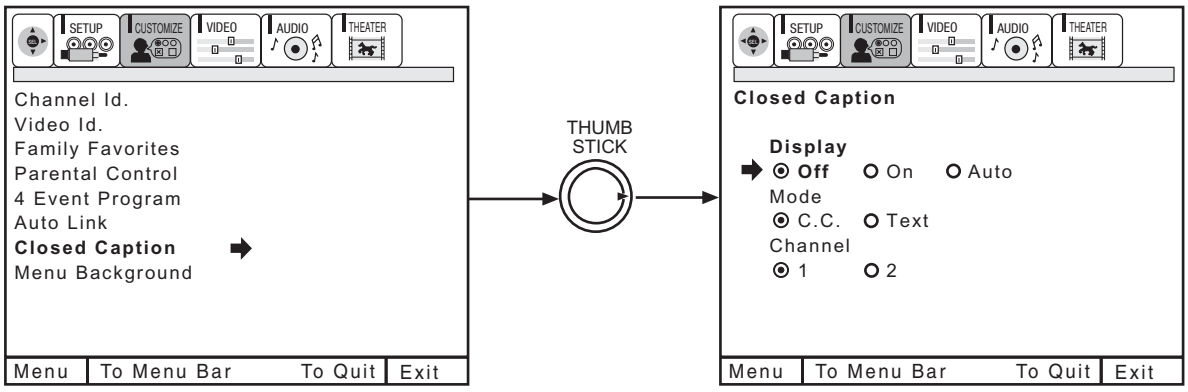
Select OFF to disable this function.
Press EXIT to quit menu or THUMB STICK ◄ to return to previous menu.

NOTE:

1. Auto Link will only work with Video: 4 input.
2. Once the TV has been turned on using the AUTO LINK feature, it must be reset before AUTO LINK is used again. To do this, turn your VCR, laserdisc, or DVD player OFF. This feature is now reset and will turn on your TV as described above.
3. When using REMOTE mode, any remote control button will substitute for your video input device play button. However, intended operation is for use with your VCR, laserdisc, or DVD play button.
4. If no remote control button is pressed after the TV is turned on by AUTO LINK for three hours, the TV will automatically turn itself off.

CLOSED CAPTION

Closed Captions are the dialogue, narration, and/or sound effects of a television program or home video which are displayed on the TV screen. Your local TV program guide denotes these programs as CC or .



DISPLAY: **ON/OFF** will turn the CC display on or off.

AUTO will display closed captions when audio is muted.

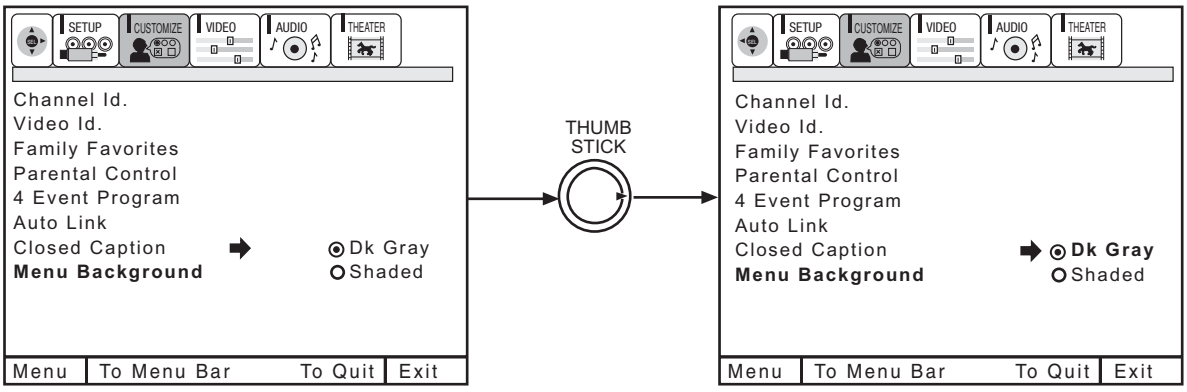
MODE: **C.C.** (Closed Caption) is for the program you are viewing.

TEXT is for additional information such as news reports or a TV program guide. This information covers the entire screen and viewing the TV program is not possible. TEXT may not be available with every CC program.

CHANNEL: **1** is used for the primary language (usually English).
2 is sometimes used for a second language (may vary by region).

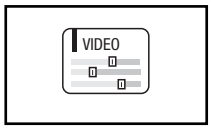
Use THUMB STICK ▲ or ▼ to highlight the function to change then press down on THUMB STICK to change the function.
Press EXIT to quit menu or THUMB STICK ◄ to return to previous menu.

MENU BACKGROUND This function allows you to choose from two menu backgrounds.

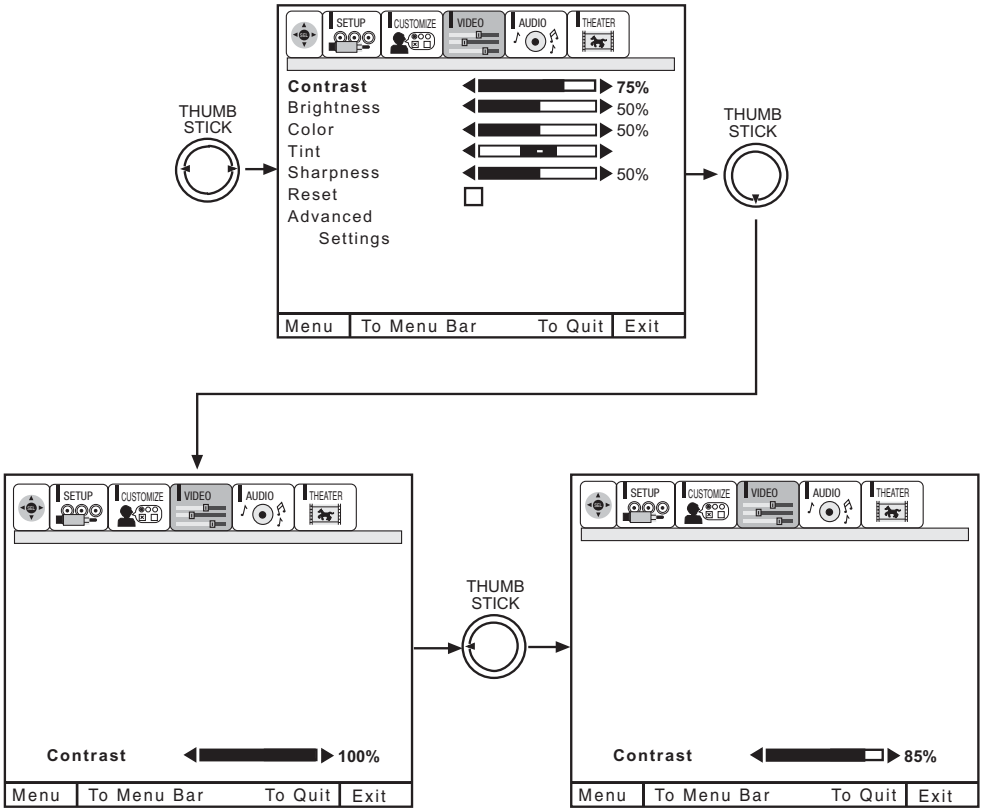


Use THUMB STICK ▲ or ▼ to highlight MENU BACKGROUND and press down on THUMB STICK to change menu background.
Press EXIT to quit menu or THUMB STICK ◄ to return to previous menu.
Select dark GRAY and a gray background is visible (no picture can be seen behind menu screen), select SHADED and a light background is visible.

VIDEO



Select VIDEO to adjust picture settings and improve picture quality.



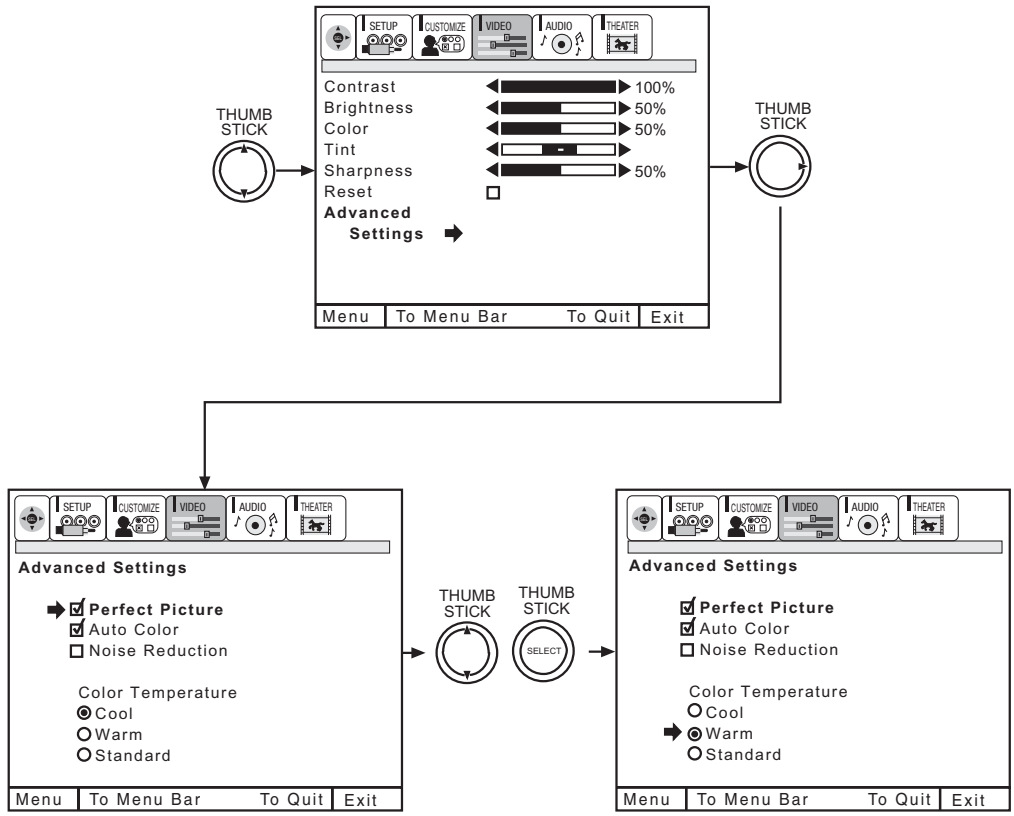
Use the THUMB STICK ▲ or ▼ buttons to highlight the function to be adjusted.
Press the THUMB STICK ◄ or ► buttons to adjust the function.
Press EXIT to quit menu.

NOTE: ¥If CONTRAST is selected, you are adjusting CONTRAST. The additional menu items BRIGHTNESS, COLOR, TINT, and SHARPNESS can be selected and adjusted in the same manner.
¥Contrast and Brightness adjustments will affect only the main picture. These adjustments will not affect the sub-picture.

Contrast	Use this function to change the contrast between black and white levels in the picture. This adjustment will only affect the picture when ADVANCED SETTINGS PERFECT PICTURE is OFF. (see page 50)
Brightness	Use this function to adjust overall picture brightness.
Color	Use this function to adjust the level of color in the picture.
Tint	Use this function to adjust flesh tones so they appear natural. (It may be necessary to adjust TINT to obtain optimum picture quality when using the COMPONENT VIDEO: Y-P_BP_R INPUT 4 jacks).
Sharpness	Use this function to adjust the amount of fine detail in the picture.
Reset	When RESET is selected, press down on THUMB STICK to return video adjustments to factory preset conditions.

ADVANCED SETTINGS

Your HITACHI Projection TV has a PERFECT PICTURE function which will automatically adjust picture settings to produce the highest quality picture possible.
When PERFECT PICTURE is highlighted, press SELECT to turn the PERFECT PICTURE on or off.



Use THUMB STICK ▲ or ▼ to select function.

Press down on THUMB STICK button to change the function setting. When the function has an ✓ in the box, it is ON.

Press EXIT to quit menu or THUMB STICK ◄ to return to previous menu.

PERFECT PICTURE

When the Perfect Picture function is on, the TVs internal computer will perform the following:

1. Automatically monitor and adjust contrast depending on room lighting (sensor is located in the front panel) to produce a more natural picture.
2. Automatically monitor and adjust color levels and maintain natural flesh tones.
3. Automatically compensate for weak or strong TV signals to produce a clear picture.

Turn the Perfect Picture function off to control other VIDEO SETTINGS.

AUTO COLOR

The AUTO COLOR function automatically monitors and adjusts the color to maintain constant color levels even after a program or channel changes. It also maintains natural flesh tones while preserving fidelity of background colors. (This function will automatically set to on and cannot be turned off when the PERFECT PICTURE function is ON.)

NOTE: It may be necessary to set AUTO COLOR-ON to obtain optimum picture quality when using the COMPONENT VIDEO: Y-$P_B P_R$ INPUT 4 jacks.

NOISE REDUCTION

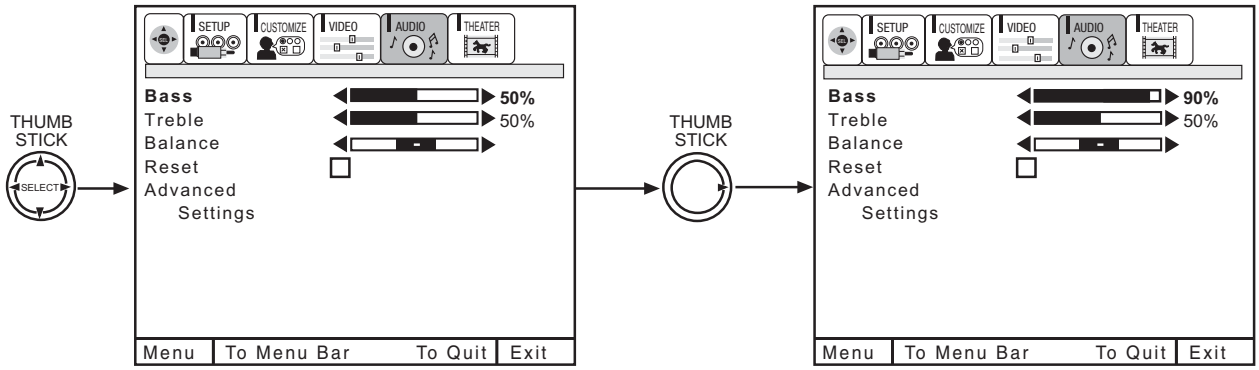
The NOISE REDUCTION function automatically reduces conspicuous noise in the picture without degrading picture quality. (This function will automatically set to on and cannot be turned off when the PERFECT PICTURE function is ON.)

COLOR TEMPERATURE

Set this to WARM for hotter colors with more red, or set to COOL for less intense colors with more blue, or STANDARD for standard color.

AUDIO

Select AUDIO SETTINGS to adjust the TV to your preference and to improve the sound quality.



Use THUMB STICK ▲ or ▼ to highlight the function to be adjusted.
Press THUMB STICK ◄ or ► to adjust the function.
Press EXIT to quit MENU.

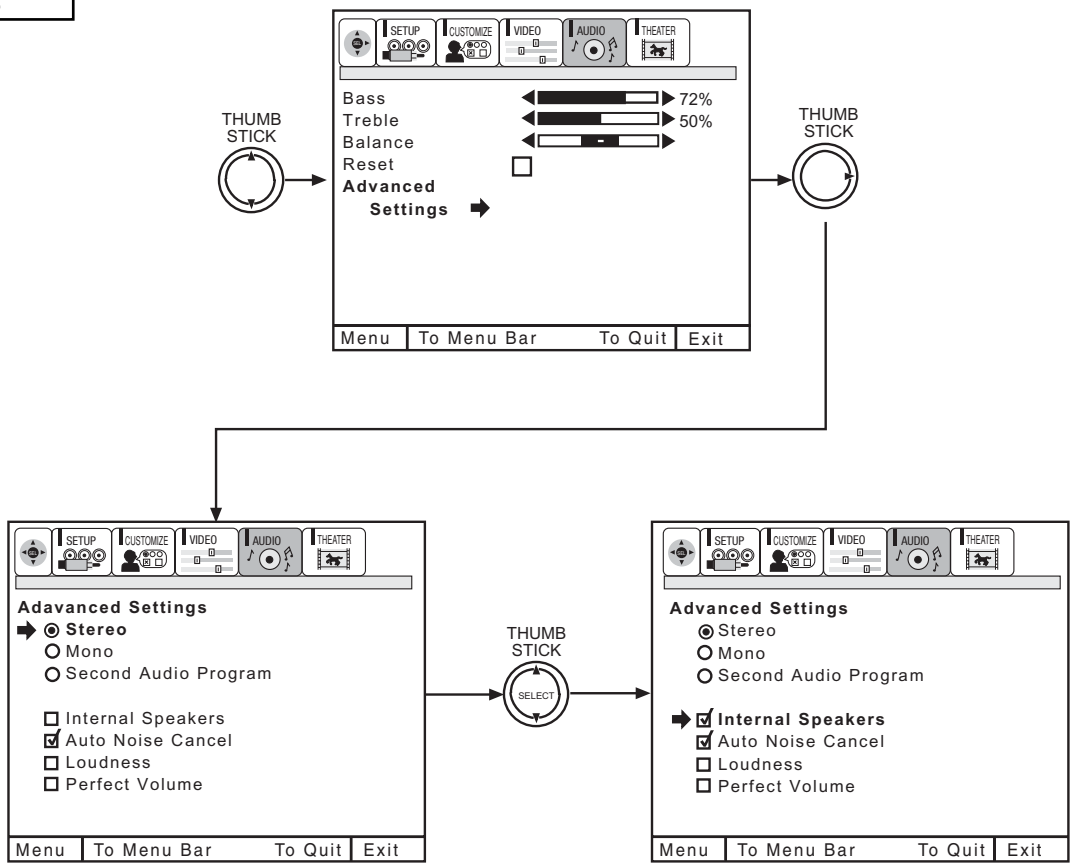
NOTE: If BASS is selected you are adjusting BASS. The additional menu items TREBLE and BALANCE can be selected and adjusted in the same manner.

Bass	This function controls the low frequency audio to all speakers.
Treble	This function controls the high frequency audio to all speakers.
Balance	This function will control the left to right balance of the TV internal speakers and the AUDIO TO HI FI output.
Reset	When RESET is selected, press down on THUMB STICK to return audio adjustments to factory preset conditions.

AUDIO

ADVANCED SETTINGS

Use ADVANCED SETTINGS to improve the sound performance of your TV, depending on listening conditions.



Press THUMB STICK ▲ or ▼ to highlight a function. Press down on THUMB STICK to change the function setting. When the function has an ✓ in the box, it is ON.

MTS MODE

Multi-Channel Television Sound will allow you to select STEREO (a stereo broadcast), MONO (monaural sound) used when receiving a weak stereo broadcast or SAP (second audio program) which may be a secondary language, weather report, etc.
The sources received will be displayed at the top center edge of the TV. The source you select will be displayed above the sources received. See example below for each selection when both stereo and second audio are received (monaural is always received).

STEREO SELECTED

SAP SELECTED

MONO SELECTED

INTERNAL SPEAKERS

This function is useful when first setting up the external speakers, or if you prefer to use only speakers from a separate stereo system.

AUTO NOISE CANCEL

This function eliminates the noise between stations. If a channel is tuned and is noisy, this function will automatically eliminate the audio for that channel.

LOUDNESS

This function will improve the quality of both low and high frequency sounds when listening at low volume levels.

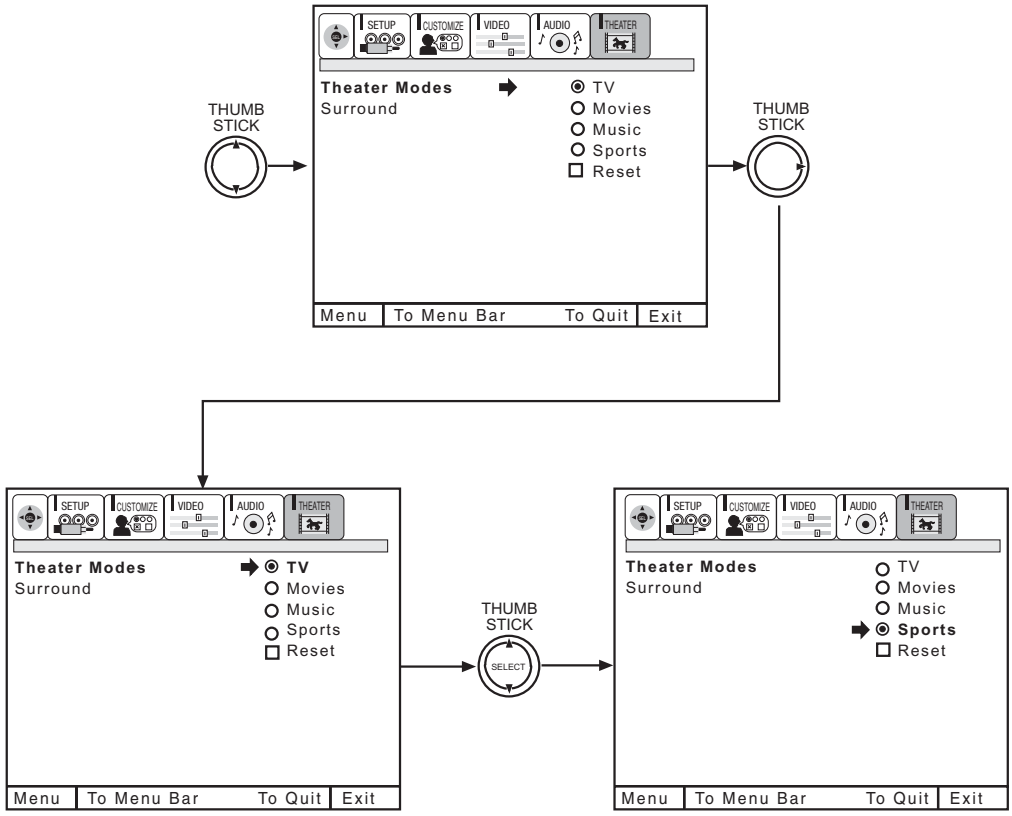
PERFECT VOLUME

This function will automatically adjust volume so each channel has the same average volume level.

THEATER

Use this function to choose picture and audio settings for a true home THEATER experience.

THEATER MODES Use this function to choose from automatic picture and audio settings to optimize your TV s performance.



Use THUMB STICK ▲ or ▼ to highlight THEATER MODES function.
Press down on THUMB STICK to change THEATER MODES function.

When TV mode is chosen, the following are automatically set:
CONTRAST-74%, AUTO COLOR-ON, COLOR TEMP.-WARM, LOUDNESS-ON, PERFECT VOLUME-ON, SURROUND - OFF.

When MOVIE mode is chosen, the following are automatically set:
CONTRAST-60%, AUTO COLOR-ON, COLOR TEMP.-STANDARD, LOUDNESS-OFF, PERFECT VOLUME-OFF, BASS-63%, TREBLE-50%, TRUSURROUND - ON, SRS - OFF.

When MUSIC mode is chosen, the following are automatically set:
CONTRAST-74%, AUTO COLOR-ON, COLOR TEMP.-COOL, LOUDNESS-OFF, PERFECT VOLUME-OFF, TRUSURROUND - OFF, SRS - ON.

When SPORTS mode is chosen, the following are automatically set:
CONTRAST-Maximum, AUTO COLOR-ON, COLOR TEMP.-COOL, LOUDNESS-OFF, PERFECT VOLUME-OFF, BASS-63%, TRUSURROUND - ON, SRS - OFF.

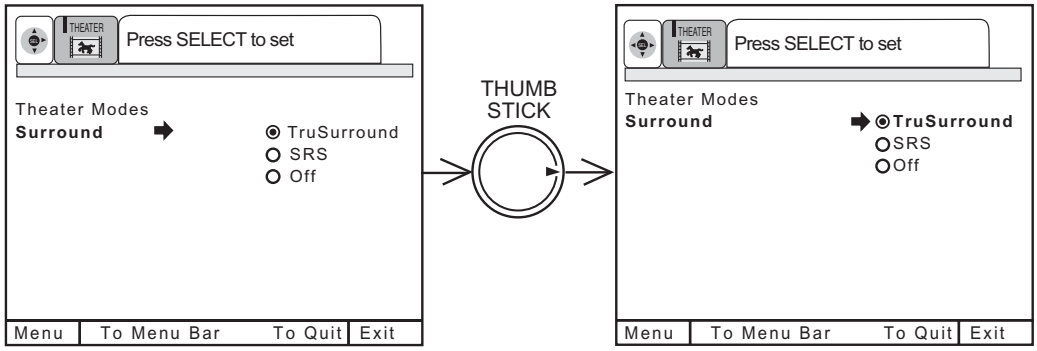
You can customize each of the above modes (TV, MOVIE, MUSIC, and SPORTS) to your preference to increase viewing performance and pleasure, depending upon the video program being viewed. However, if RESET is selected, all modes will reset to the initial conditions as explained above.

When RESET is selected, it will take approximately two seconds to return to factory conditions (SPORTS mode).

Press EXIT to quit menu or THUMB STICK ◄ to return to previous menu.

Surround

The following surround settings will reproduce the live sound you would hear in concert halls, sports stadiums, movie theaters, etc. with only two speakers.



To enter the SURROUND MODE, use THUMB STICK ▲ or ▼ to highlight then press down on THUMB STICK to select SURROUND MODE of your choice.

TruSurround by SRS

TruSurround is a Dolby®-certified technology that allows for a virtualized surround sound experience from a two-speaker playback using any multichannel audio source, including Dolby Digital, Dolby Surround or Dolby Pro Logic. TruSurround retains all of the original audio information of the multi-channel audio source giving the listener the sensory perception that they are surrounded by additional phantom speakers. This completely immersive sound experience is achieved through only two standard stereo speakers.

SRS by SRS

Based on the principles of the human hearing system, SRS technology delivers and exciting and realistic 3D Sound experience from just two external speakers (or) the two internal speakers of your HITACHI Television. If your HITACHI Television is connected to an external audio system, SRS will also create an incredible 3D sound experience from two speakers and even enhance a complete multi-speaker surround sound system.

SURROUND OFF

Use this for normal stereo/mono broadcasts.

NOTE: SRS, TruSurround, and the (●) symbol are trademarks of SRS Labs, Inc. SRS and TruSurround technologies are incorporated under license from SRS Labs, Inc.

CARE OF YOUR HITACHI PROJECTION TV AND YOUR REMOTE CONTROL

DO

Dust the screen and cabinet with a soft cloth.

Clean the screen with a dry cloth.

Place your television away from extreme heat, humidity, and extremely dusty places.

Remove the plug from the wall outlet if your television will not be used for a long period of time, for instances, when you go on vacation.

DO NOT

Do not clean your screen or cabinet with strong cleaners, polishes or a chemically treated cloth.

Do not place rubber or vinyl products or cellophane tape on your television.

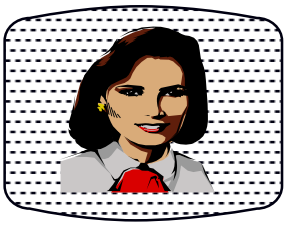
Do not touch the screen too often.

Do not subject the remote control to shocks such as dropping it on the floor, etc. Physical damage to the precision parts may result.

Avoid placing the remote control in a high humidity place or getting it wet. Do not leave it on or near a heater. Excessive heat or moisture may cause the unit to cease operation.

When the batteries run down, remote control operation will become erratic or possibly stop altogether. Replace the old batteries with two new AA size batteries.

Exposure of the viewing screen to prolonged direct sunlight or heat may cause the screen to permanently warp, resulting in a distorted picture.

	¥ IGNITION NOISE: Black spots or horizontal streaks may appear, picture may flutter or drift. Usually caused by interference from automobile ignition systems, neon lamps, electrical drills, and other electrical appliances.
	¥ GHOSTS: Ghosts are caused by the television signal following two paths. One is the direct path and the other is reflected from tall buildings, hills or some other objects. Changing the direction or position of the antenna may improve reception. Ghosting may also be caused by defects in the antenna system such as unshielded leads or connecting several sets to the same antenna without using multiple antenna couplers.
	¥ SNOW: If your receiver is located in the fringe area of a television station where the signal is weak, your picture may be marred by the appearance of small dots. When the signal is extremely weak, it may be necessary to install a special antenna to improve the picture.
	¥ RADIO FREQUENCY INTERFERENCE: The interference produces moving ripples or diagonal streaks, and in some cases, causes loss of contrast in the picture.

NOTE: The TV set can generate sound distortion in external devices such as a radio. Please separate radio equipment from the TV set to a considerable distance.

SYMPTOMS	CHECK THESE ITEMS AND TRY THESE ADJUSTMENTS: Be sure external connection is correct	Be sure power cord is plugged in	Be sure TV is switched "ON"	Try another channel (station trouble)	Check antenna connections (back of TV)	Check antenna for broken lead-in wire	Check outside antenna	Check for local interference	Adjust Contrast control	Adjust Brightness control	Adjust Color control	Adjust Tint control	Adjust Volume control
No Picture, no sound	●	●	●	●	●	●	●						
Sound OK, picture poor	●			●	●	●	●	●	●	●			
Picture OK, sound poor	●			●	●	●	●	●					●
Picture blurred	●			●	●	●	●	●					
Lines or streaks in picture				●	●	●	●	●					
Poor reception on some channels				●	●	●	●	●					
Picture rolls vertically				●				●					
No color	●			●	●	●	●				●		
Poor color	●			●	●	●	●				●	●	

HITACHI Projection Television incorporates advanced power surge protection technology designed to protect against component or circuit damage due to external or internal voltage power surges.

IF YOUR TELEVISION SHOULD APPEAR TO HAVE A LOSS OF POWER, PLEASE FOLLOW THIS PROCEDURE:

1. Press the power switch (ON/OFF switch) once.
2. If there is still no power, wait 30 seconds and press the power switch again.
3. If there is still no power, unplug the power cord from the wall. Wait 30 seconds and plug the power cord back in. Press the power switch again.

This protective technology should provide for years of lasting entertainment from your HITACHI Projection Television.

SPECIFICATION

Features:

- Superfine Picture Quality
  1000 Line Horizontal Resolution
- Pure Green and Red Filter Lenses
- PERFECT PICTURE System
- Remote (Controls many DVD/VCR brands, cable boxes, and satellite boxes.)
- High Definition On-Screen Display (UltraTEC BIT-MAP)
- Full Set of Input Jacks, including S-Video
- COMPONENT VIDEO: $Y/P_B/P_R$ Input Jacks
- Velocity Modulation
- Closed Caption Decoder
- High Resolution Picture-In-Picture with Freeze
- Tuned Port Bass Reflex Speakers
- Dual Antenna Inputs
- Video Input Sensor
- Auto Link
- 3 Dimensional Y/C Comb Filter
- Magic Focus (Auto Digital Convergence)
- Energy Star® Compliant
- TruSurround Technology.
- SRS Technology
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Inputs:

- Power Input . . . . . .AC 120V, 60Hz

- Power Consumption
  -Refer to rear panel at the back of the TV

- Antenna input impedance . . . . . .75 Ohm
- Channel coverage . . . . . .181ch.
  VHF-Band . . . . . .2 ~ 13
  UHF-Band . . . . . .14 ~ 69
  CATV Mid Band . . . . . .A-5 ~ A-1
  . . . . . .A-I
  Super Band . . . . . .J-W
  Hyper Band . . . . . .W+1 - W+28
  Ultra Band . . . . . .W+29 - W+84

- Video . . . . . .1.0Vp-p, 75 Ohm

- S-Video
  Luminance (Y) . . . . . .1.0Vp-p, 75 Ohm
  Chrominance (C) . . . . . .0.286Vp-p, 75 Ohm

- Audio input impedance . . . . . .47k Ohm

- Average input level 470mVrms

- Component Video
  Luminance (Y) . . . . . .1.0Vp-p, 75 Ohm
  Chrominance (Cb,Cr) . . . . . .0.7Vp-p, 75 Ohm

Outputs:

- Video 1.0Vp-p. 75Ohm

- Audio . . . . . .470mVrms, 1k Ohm

Dimensions:

	53SBX10B
• Height (in.)	51 5/8
• Width (in.)	46
• Depth (in.)	26 1/4
• Weight (lbs.)	223

NOTE: Due to improvements, specifications in this operating guide are subject to change without notice.

HITACHI

service hotline

To locate an authorized HITACHI service facility in the continental U.S.A. only.

DIAL TOLL FREE

7 days a week, 24 hours a day

800 HITACHI

(1-800-448-2244)

Hitachi America, Ltd.
Home Electronics Division

Hitachi has made every effort to assure you hours of trouble free operation from your unit. However, should you require service, a network of Hitachi Authorized Service Facilities has been established in all 50 states and Puerto Rico. Each facility will provide you with convenient and expedient assistance. Our service hotline operator will direct you to the Hitachi Authorized Service Facility nearest you. Just present proof of purchase and/or delivery receipts to the Hitachi Authorized Service Facility, and service will be rendered in accordance with the terms of the limited warranty as stated on your warranty card or operating guide.

Should you have any questions regarding warranty, service, operation, or technical assistance, please contact:

Hitachi America, Ltd.
Home Electronics Division
1855 Dornoch Court
San Diego, CA 92154

In Canada, please contact: 1-800-HITACHI (1-800-448-2244)

During business hours
Monday-Friday **EST 9:00am - 7:00pm**
Saturday **EST 9:00am - 5:00pm**

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HITACHI

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